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Financial Accounting and Reporting

by

Vincent W. Lambers, MBA, CPA,
Donald T. Hanson, MBA, CPA,
William A. Grubbs, MBA, CPA
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Vincent W. Lambers, CPA
Donald T. Hanson, CPA
William A. Grubbs, CPA
North Andover, Massachusetts
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Volume 1—FINANCIAL ACCOUNTING AND REPORTING

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Chapter One
Partnerships

DEFINED
"Association of two or more persons to carry on, as co-owners, a business for profit."

AGREEMENTS
Can be expressed (oral or written contract) or implied (actions).
Should be in writing for protection of partners. The agreement governs the formation, operation, distribution of income or loss, and dissolution of the partnership.

DIVISION OF PROFITS
• Profits can be shared in any way agreeable to the partners.
• If the agreement is silent, the law assumes that profits and losses will be shared equally.
• Amount of capital contributed has no effect on profit division unless specified in the agreement.

ADMISSION OF PARTNER
• Admission or withdrawal of a partner generally dissolves the partnership and brings into being a new partnership.
• New articles of partnership should be drawn up.
• A new partner can purchase an interest or invest in the partnership.

Care should be taken to distinguish between a purchase of an interest and the investment in a partnership. The difference is critical to the proper procedure to follow in partnership problems.
1. Purchase of interest. Example: A purchases interest of X in XYZ partnership or part of interest of XYZ in XYZ partnership. The amount A paid for his interest is outside the partnership and not recorded in the books.
2. Investment. Example: A invests $10,000 in XYZ partnership, thereby increasing the capital of the partnership.

PURCHASE OF AN INTEREST
1. Payment to an existing partner
No cash transaction is to be entered on the books in the purchase of an interest. X, Y, and Z have capitals of $10,000, $15,000 and $20,000 respectively. Z sells half of his capital interest to P for the sum of $12,000.

Entry: Z, Capital $10,000
      P, Capital  $10,000

Transaction is between Z and P as to amount and Z has merely transferred one-half of his interest to P.

2. Payment to more than one partner
Purchase at book value: P purchases a one-fourth interest for $11,250.

Entry: X, Capital $2,500
       Y, Capital $3,750
       Z, Capital $5,000
       P, Capital  $11,250

Purchase at more than book value: Where purchase is at more than book value, goodwill may or may not be recognized.
Example: P pays $15,000 for a one-fourth interest and XYZ share profits on a 4:3:3 basis.
a. **Goodwill not recognized.** Transfer of capital same as above. The existing partners will divide the $15,000 cash on some agreed basis or as follows:

<table>
<thead>
<tr>
<th></th>
<th>X(40)</th>
<th>Y(30)</th>
<th>Z(30)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Capital</td>
<td>$2,500</td>
<td>$3,750</td>
<td>$5,000</td>
<td>$11,250</td>
</tr>
<tr>
<td>Amount in Excess of Capital in P&amp;L Ratio</td>
<td>1,500</td>
<td>1,125</td>
<td>1,125</td>
<td>3,750</td>
</tr>
<tr>
<td></td>
<td>$4,000</td>
<td>$4,875</td>
<td>$6,125</td>
<td>$15,000</td>
</tr>
</tbody>
</table>

b. **Goodwill recognized.** If P is willing to pay $15,000 for a one-fourth interest, the implied value of the partnership is $60,000 ($15,000 × 4). Goodwill must be placed on the books prior to the admission of P to bring total capital to $60,000.

<table>
<thead>
<tr>
<th>Goodwill</th>
<th>$15,000</th>
<th>($60,000 – $45,000 XYZ total capital)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X, Capital</td>
<td>$6,000</td>
<td>($15,000 × 40%)</td>
</tr>
<tr>
<td>Y, Capital</td>
<td>4,500</td>
<td>($15,000 × 30%)</td>
</tr>
<tr>
<td>Z, Capital</td>
<td>4,500</td>
<td>($15,000 × 30%)</td>
</tr>
</tbody>
</table>

To recognize goodwill and increase total capital to $60,000.

(1) X, Capital $4,000
(2) Y, Capital 4,875
(3) Z, Capital 6,125
P, Capital $15,000

(1) $16,000 × 1/4    (2) $19,500 × 1/4    (3) $24,500 × 1/4

To record transfer of capital to P.

**Purchase at less than book value:** P pays $10,000 for a one-fourth interest.

a. **No adjustment of the old partner's capital account.** The same journal entry as in #2 above will be recorded since P will receive $11,250 in capital for $10,000. The existing partners will divide the $10,000 cash on some agreed basis or as follows:

<table>
<thead>
<tr>
<th></th>
<th>X(40)</th>
<th>Y(30)</th>
<th>Z(30)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>$2,500</td>
<td>$3,750</td>
<td>$5,000</td>
<td>$11,250</td>
</tr>
<tr>
<td>Loss: $11,250 – 10,000 in P&amp;L ratio</td>
<td>(500)</td>
<td>(375)</td>
<td>(375)</td>
<td>(1,250)</td>
</tr>
<tr>
<td>Division of Cash</td>
<td>$2,000</td>
<td>$3,375</td>
<td>$4,625</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

b. **Adjustment of old partner's capital account:** In this situation the partners are giving recognition to the loss in value of their interest. Total capital is reduced to $40,000 implied value ($10,000 × 4), with the resulting asset write-down of $5,000.

<table>
<thead>
<tr>
<th></th>
<th>X(40)</th>
<th>Y(30)</th>
<th>Z(30)</th>
<th>P</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Capitals</td>
<td>$10,000</td>
<td>$15,000</td>
<td>$20,000</td>
<td>$45,000</td>
<td></td>
</tr>
<tr>
<td>Asset write-down</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$45,000 – $40,000 in P&amp;L ratio</td>
<td>(2,000)</td>
<td>(1,500)</td>
<td>(1,500)</td>
<td>(5,000)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8,000</td>
<td>13,500</td>
<td>18,500</td>
<td>40,000</td>
<td></td>
</tr>
<tr>
<td>Capital transfers</td>
<td>(2,000)</td>
<td>(3,375)</td>
<td>(4,625)</td>
<td>10,000</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>$ 6,000</td>
<td>$10,125</td>
<td>$13,875</td>
<td>$10,000</td>
<td>$40,000</td>
</tr>
</tbody>
</table>
INVESTMENT IN A PARTNERSHIP BY CONTRIBUTION
TO THE FIRM'S CAPITAL

Asset values may be adjusted before admission of any new partner(s). An investment may result in the following:

- Recognition of either goodwill or bonus to the old partners.
  
  - Goodwill is placed on the books before admission of a new partner.
  - Bonus--part of the capital contributed is credited to the account of the old partners.

- Recognition to the incoming partner in the form of either goodwill or bonus.

1. **No goodwill or bonus.**
A and B have capitals of $10,000 and $20,000 respectively, share profits and losses equally, and C is to be admitted to the firm by making a contribution to the firm's capital. C is to invest $10,000.

   Entry:   Cash  $10,000
            C, Capital  $10,000

2. **Goodwill recognized to old partners**
C is to invest $12,000 for a one-fourth interest. Analysis: Implied value is $48,000 ($4 × $12,000). C's contribution plus A and B's capital equals $42,000; therefore, $6,000 in goodwill must be added to total capital.

   Entries:   Goodwill $6,000
              A, Capital  $3,000
              B, Capital  3,000
            C, Capital  $12,000
            Cash  12,000

3. **Bonus allowed to old partners**
C is to invest $18,000; capital of A and B plus C's contribution equals $48,000. Since C is contributing $18,000 but is to receive only a one-fourth interest of $12,000 ($1/4 × $48,000), a bonus of $6,000 is given to A and B.

   Entry:   Cash  $18,000
            A, Capital  3,000
            B, Capital  3,000
            C, Capital  $12,000

4. **Goodwill allowed to new partner**
C is to invest $9,000 of miscellaneous business assets and agreed total capital is to be $40,000.

   Entry:   Goodwill $1,000 ($40,000 – $30,000 – $9,000)
            Misc. Assets  9,000
            C, Capital  $10,000 ($1/4 × 40,000)

5. **Bonus allowed to new partner**
C is to invest $9,000; a bonus is allowed to C.

   Entry:   Cash  $9,000
            A, Capital  375
            B, Capital  375
            C, Capital  $9,750 ($1/4 × 39,000)
DIVISION OF PROFITS

Division of profits is governed by the partnership agreement. Profits may be divided:

1. Equally
2. On some other fractional basis
3. In capital ratio
4. On average capital ratio
5. By allowing interest on capitals and dividing remainder, and
6. By allowing salaries to the partners and dividing remaining profit.

If the agreement makes no provision for the division of profit and losses, the law assumes they will be shared equally.

1. Interest on Capital
   - Partner cannot claim interest on capital unless provided for in the partnership agreement.
   - Interest on capital should not be included in income statement as an expense.
   - Interest paid on partners' loans may be treated as a financial expense.

2. Partners' Salaries: Treated as a division of profits. Allocation of partners' "salaries" may exceed partnership income and create a loss to be allocated to all partners according to the partnership agreement.

Method of Distribution

- Allocate salaries, interest first
- Distribute remaining profit (loss) per agreement

Example: A, B, and C agreed to the following distribution of profit:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual salary</td>
<td>$10,000</td>
<td>$8,000</td>
<td>0</td>
</tr>
<tr>
<td>Interest on average capital</td>
<td>0</td>
<td>4%</td>
<td>10%</td>
</tr>
<tr>
<td>Remainder</td>
<td>40%</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>Average capital</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$200,000</td>
</tr>
</tbody>
</table>

Profit distribution under three different assumptions:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest allocation</td>
<td>-0--</td>
<td>$2,000</td>
<td>$20,000</td>
<td>$22,000</td>
</tr>
<tr>
<td>Salary allowance</td>
<td>$10,000</td>
<td>8,000</td>
<td>-0--</td>
<td>18,000</td>
</tr>
<tr>
<td></td>
<td>$10,000</td>
<td>$10,000</td>
<td>$20,000</td>
<td>$40,000</td>
</tr>
</tbody>
</table>

1. Assume $50,000 profit
   - Remainder ($50,000 – $40,000) | 4,000 | 4,000 | 2,000 | 10,000 |

2. Assume $20,000 profit
   - Remainder ($20,000 – $40,000) | (8,000) | (8,000) | (4,000) | (20,000) |

3. Assume $10,000 loss
   - Remainder (– $10,000 – $40,000) | (20,000) | (20,000) | (10,000) | (50,000) |

RETIREMENT OF A PARTNER

Adjustment of asset values may be required to determine the fair equity of a retiring partner. This may be necessary to:

a. Correct improper operating charges of prior periods (bad debts, accruals, depreciation and recognition of inventories).
b. Give recognition to the existence of goodwill.
c. Give recognition to changes in market values.
Problem: C is to retire from A, B, C partnership. A goodwill value of $6,000 has been agreed upon.

1. **Goodwill recorded on the books for (1) all partners or (2) only the retiring partner.**

   (1) Goodwill
   
   A, Capital  $2,000
   B, Capital  2,000
   C, Capital  2,000
   
   (2) Goodwill
   
   C, Capital  $2,000

2. **Implied bonus or goodwill**

Assume that A, B and C have capitals of $10,000 each and share profits equally. C is to retire and is to be paid $12,000 from partnership assets. The $2,000 excess of the payment to C over his capital may be recorded as a bonus or as goodwill.

   Bonus
   
   A, Capital  $1,000
   B, Capital  1,000
   C, Capital  10,000
   
   Cash  $12,000

   Goodwill:
   
   C, Capital  $2,000
   C, Capital  $2,000
   Cash  12,000

**DISSOLUTION AND LIQUIDATION**

1. **Causes of Dissolution**

Dissolution occurs when the existing partnership arrangement is altered for some reason. Liquidation may follow dissolution but often outsiders would be unaware of the end of one partnership and the start of another.

2. **Liquidation—Terminating the Affairs of a Business**

   A. **Procedure:**
   
   (1) Realization of assets—convert assets into cash
   (2) Division of loss or gain on realization, by charges or credits to partner's capital
   (3) Payment of the liabilities
   (4) Payment of the partner's interest

   B. **Order of distribution in liquidation**
   
   (1) Outside creditors
   (a) Priority claims such as artisans, government, liquidation expenses.
   (b) Secured creditors to the extent covered by proceeds from sale of pledged assets. Excess claim treated as unsecured credit.
   (c) Unsecured credit to the extent covered by proceeds from sale of unpledged (or free) assets.
   (2) Partners for loan accounts (right of "offset" reserved, however)
   (3) Partners' capital

As a practical matter partners' loans and capital are considered as one. Any known gain or loss should be distributed before any payments are made to partners.
**Problem:** A and B have non-cash assets of $40,000, liabilities of $5,000 and capital of $20,000 and $15,000 respectively. Assets are sold for $32,000. Determine amount distributable to A and B in liquidation.

### A and B

#### Statement of Partnership Liquidation

<table>
<thead>
<tr>
<th></th>
<th>Assets</th>
<th>Partners' Capitals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cash</td>
<td>Non-Cash</td>
</tr>
<tr>
<td>Realization and Loss</td>
<td>$32,000</td>
<td>$40,000</td>
</tr>
<tr>
<td></td>
<td>$32,000</td>
<td>--0--</td>
</tr>
<tr>
<td>Payment of Liabilities</td>
<td>(5,000)</td>
<td>5,000</td>
</tr>
<tr>
<td>Payment to Partners</td>
<td>(27,000)</td>
<td></td>
</tr>
</tbody>
</table>

**Problem:** Debit balance in partner's capital account. Assets were sold for $50,000.

<table>
<thead>
<tr>
<th></th>
<th>Assets</th>
<th>Partners' Loans</th>
<th>Partners' Capitals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cash</td>
<td>Non-Cash</td>
<td>Liabilities</td>
</tr>
<tr>
<td>Real. and Loss</td>
<td>$50,000</td>
<td>$80,000</td>
<td>$(15,000)</td>
</tr>
<tr>
<td></td>
<td>50,000</td>
<td>--0--</td>
<td>(15,000)</td>
</tr>
<tr>
<td>Combine Loan and Capital Acct.</td>
<td>50,000</td>
<td>(15,000)</td>
<td>10,000</td>
</tr>
<tr>
<td>Pay Liabilities</td>
<td>(15,000)</td>
<td>15,000</td>
<td>--0--</td>
</tr>
<tr>
<td>Pay Partners</td>
<td>(35,000)</td>
<td></td>
<td>6,000</td>
</tr>
</tbody>
</table>

**NOTE:** Right of offset exercised. Neither partner would be paid any cash until there is no danger that possible loss could exceed his capital account and loan account combined.

### LIQUIDATION IN INSTALLMENTS -- MAXIMUM POSSIBLE LOSS (MPL)

Where a partnership is liquidated and the full amount to be paid to a partner is determined before any distributions are made, losses have already been distributed to the partners. In these situations it is assured that no partner will receive more than he will be entitled to receive. However, where a liquidation occurs in stages and disbursements are made periodically, there must be assurance that no partner will receive more than he could possibly be entitled to receive. This can be done by distributing the maximum possible loss to the partners and the remaining capital balance(s) can safely be paid. **The maximum possible loss is the total of the non-cash assets.** The procedure to determine the safe distribution is:

A. Determine the maximum possible loss that the partnership could suffer.
   \[ MPL = \text{Total Assets} - \text{Cash (or Non-Cash assets)} \]
B. Distribute the MPL to the partners in P and L ratio.
C. The remaining balance is the amount that can be distributed to each partner.
D. Distribute the amount determined in C.
E. The same calculation must be made each time a distribution is made.

**NOTE:** Remember, MPL's are not actual losses, only theoretical losses; therefore, the determination of MPL should be done on a separate schedule.
ABC Partnership has the following balance sheet as of December 31st:

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities and Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash $ 35,000</td>
<td>Liabilities $ 21,000</td>
</tr>
<tr>
<td>Receivables 14,000</td>
<td>A 5,000</td>
</tr>
<tr>
<td>Other Assets 85,000</td>
<td>C 8,000</td>
</tr>
</tbody>
</table>

Partners' Capital

- A 50,000
- B 35,000
- C 15,000

$134,000 $134,000

A, B and C share profits and losses on a 5:3:2 basis. Determine the amount the partner(s) will receive by distributing the maximum possible loss.

Solution: The maximum possible loss is $99,000 ($14,000 receivables + $85,000 other assets).

<table>
<thead>
<tr>
<th>Capital balance</th>
<th>A (50%)</th>
<th>B (30%)</th>
<th>C (20%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$50,000</td>
<td>$35,000</td>
<td>$15,000</td>
<td></td>
</tr>
<tr>
<td>Additional loans</td>
<td>5,000</td>
<td>--</td>
<td>8,000</td>
</tr>
<tr>
<td>55,000</td>
<td>35,000</td>
<td>23,000</td>
<td></td>
</tr>
</tbody>
</table>

MPL—$99,000

<table>
<thead>
<tr>
<th>Amount distributed</th>
<th>$ 5,500</th>
<th>$ 5,300</th>
<th>$ 3,200</th>
</tr>
</thead>
</table>

NOTE: The cash to be distributed—$14,000—is equal to the cash available—$35,000—less the liabilities of $21,000.

CASH DISTRIBUTION PLANS

Another method of determining the amount(s) that can be distributed to a partner is by preparation of a cash distribution plan. An accountant may be asked by a partnership to devise such a plan, if the partnership should subsequently choose to liquidate, showing how any cash generated by the sale of assets should be distributed. This is similar to the ordinary procedures in liquidation where, as cash is accumulated, the accountant calculates the payments which can safely be made to partners in installments. Once the plan is prepared it may be used to determine all subsequent distributions unless the mix of partners' capital is changed by investment or withdrawal. The use of MPL and the cash distribution plan is necessary because the partners' capital account ratios differ from their P and L ratios. The plan will eventually equalize the partners' capital accounts.

The procedure for a plan for distribution of cash is as follows:

1. Add the loan accounts to the partners' capital accounts.
2. Determine the amount of loss which will extinguish the weakest partner's capital balance.
3. Distribute the loss in (2) to all partners. After one partner is eliminated, repeat the same process with the remaining partners.
4. After all but one of the partners' capital accounts are eliminated, cash distributions are determined by starting with the remaining partner's final balance (which becomes the first cash distribution) and working backwards.
ILLUSTRATION 1:
The ABCD Partnership is being dissolved. All liabilities have been liquidated. The balance of assets on hand is being realized gradually. Following are details of partners' accounts:

<table>
<thead>
<tr>
<th>Capital Account (Original Investment)</th>
<th>P and L Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>A $30,000</td>
<td>4</td>
</tr>
<tr>
<td>B 36,000</td>
<td>3</td>
</tr>
<tr>
<td>C 16,000</td>
<td>2</td>
</tr>
<tr>
<td>D 22,000</td>
<td>1</td>
</tr>
</tbody>
</table>

PREPARE a schedule showing how cash payments should be made to the partners as assets are realized.

<table>
<thead>
<tr>
<th></th>
<th>A (40%)</th>
<th>B (30%)</th>
<th>C (20%)</th>
<th>D (10%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital balance</td>
<td>$30,000</td>
<td>$36,000</td>
<td>$16,000</td>
<td>$22,000</td>
</tr>
<tr>
<td>Loss (1) $75,000</td>
<td>30,000</td>
<td>22,500</td>
<td>15,000</td>
<td>7,500</td>
</tr>
<tr>
<td>Loss to eliminate C</td>
<td>-0--</td>
<td>13,500</td>
<td>1,000</td>
<td>14,500</td>
</tr>
<tr>
<td>$1,000 ÷ 2/6 = $3,000</td>
<td>1,500</td>
<td>1,000</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Loss to eliminate B</td>
<td>12,000</td>
<td>-0--</td>
<td>14,000</td>
<td></td>
</tr>
<tr>
<td>$12,000 ÷ 3/4 = $16,000</td>
<td>12,000</td>
<td>4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First cash payment</td>
<td>-0--</td>
<td></td>
<td>10,000</td>
<td></td>
</tr>
</tbody>
</table>

Cash distribution plan-- 1st $10,000 to D
( Liabilities must be  Next $16,000—3/4 to B; 1/4 to D
paid or cash reserved  Next $3,000—3/6 to B; 2/6 to C; 1/6 to D
before payments are  All remaining cash in P and L ratio
made to partners)

(1) To determine the weakest partner, compare the capital account balance with the P and L ratio. A is weaker than B because A would be charged with 40% of any loss. A is also weaker than C and D even though A has greater total capital. Another method of determining the weakest partner is to divide the capital account by the loss ratio.

\[
A = \frac{30,000}{.4} = 75,000 \text{ loss will eliminate A}
\]

\[
B = \frac{36,000}{.3} = 120,000 \text{ loss will eliminate B}
\]

\[
C = \frac{16,000}{.2} = 80,000 \text{ loss will eliminate C}
\]

\[
D = \frac{22,000}{.1} = 220,000 \text{ loss will eliminate D}
\]

We can see from this that D will receive the first cash distribution made to the partners, followed by B, C, and then A.

(2) After each partner is eliminated, the loss which eliminates the next weakest partner is determined by using the loss ratio of the remaining partners, or after A is eliminated 3:2:1. Assume that $20,000 in cash is available for distribution but $5,000 is reserved for payment of liabilities. Following the plan the cash would be distributed as follows:
Assume that next month $20,000 is to be distributed. The plan would continue at the point reached last month.

Observe that when all partners have received some cash, the capital accounts are in the same percentage as the P and L ratio and that future distributions can be made in the P and L ratio.

**INCORPORATION OF A PARTNERSHIP**

**Procedures**

A. Adjust asset values to bring balances into conformity with values agreed upon for the purpose of transfer to the corporation. The net effect of these adjustments will be carried to the partners' capital accounts in their respective P and L ratios.

B. Change from a partnership to corporation is made by debiting the partners' capital accounts and crediting capital stock account for the shares issued to the partners.

**BONUS COMPUTATIONS**

Frequently accountants are asked to compute the amount of bonus to be paid a corporate executive, a partner or employee under a profit sharing plan. The factors which may affect the bonus are:

- Net income before tax and/or bonus
- Tax rate—The bonus itself affects the tax since the bonus is deductible. The bonus may be computed before or after the tax depending on the profit sharing arrangement. Partnerships as entities do not pay taxes; however, an imputed tax rate may be used to compute the bonus.
- Bonus percentage—May be before or after bonus and may be applicable to income above a certain amount.

In solving such problems, a good approach is to write the particular problem in equation form with no attempt to quantify the elements of the equation. Then substitute known quantities in the equation and solve for B (Bonus).

**Example**: A company's bonus plan provides that the company will pay a bonus of one-third of its net income after taxes each year. Income before taxes and before deducting the bonus for the year is $600,000. The tax rate is 40%. What amount is the bonus?

Start with a simple expression of the situation
1. Bonus = Bonus Percent × Net Income

Now begin to substitute quantities
2. B = 33 1/3% (NI – Tax – Bonus)
3. B = 33 1/3% (600,000 – .40 [600,000 – B] – B)

Multiply the factors using the rules of algebra
4. B = 33 1/3% (600,000 – 240,000 + .4B – B)
5. B = 200,000 – 80,000 + 13 1/3% B – 33 1/3% B
Combine like terms when possible
6. \( B = 120,000 - 20\% \times B \)

Add \( 0.2B \) to both sides of the equation
7. \( 1.2B = 120,000 \)

Divide both sides by 1.2
8. \( B = 100,000 \)

Example:
The Wiley Company provides an incentive compensation plan under which its president is to receive a bonus equal to 20% of the company's income in excess of $200,000 before deducting income tax but after deducting the bonus. If income before income tax and bonus is $320,000 and the effective tax rate is 40%, the amount of bonus should be:

\[
\text{Bonus} = 20\% \times (\text{NI} - \text{Exclusion} - \text{Bonus})
\]
\[
B = 20\% \times (320,000 - 200,000 - B)
\]
\[
B = 20\% \times (120,000 - B)
\]
\[
B = 24,000 - 0.2B
\]
\[
1.2B = 24,000
\]
\[
B = 20,000
\]

IFRS INTRODUCTION

There are no IFRS differences in partnerships so it seems to be an appropriate place to talk about the background for the reasons for accounting differences between countries, the need for IFRS, IFRS as a rule-making body and the SEC rules for transition to IFRS.

Why do Accounting rules differ internationally?
Historically things like culture, sources of capital, inflation, taxation, the legal system, industry standards and business complexity have all contributed to differences in accounting rules. For example, the shareholders in the US provide the major source of capital for an entity, but in Germany, the banks provide the major source of capital. As a result, the US Standards may be more income statement oriented whereas the standards in Germany may be more balance sheet oriented. Another example relates to the netting of deferred assets with deferred tax liabilities. The rule on netting may be determined by the tax laws of the country in which the entity is located.

Why is the US considering IFRS?
The main reason is the lack of comparability between companies located in different countries.

What are IFRS?
IFRS is the abbreviation for International Financial Reporting Standards. The Standards are issued by the International Accounting Standards Board (IASB) which is located in London. The Board consists of 15 members (16 by July 1, 2012) chosen from various specified regions of the world to achieve a broad geographic representation. Nine out of 15 votes are needed to approve a standard.

Convergence
The IASB and the FASB are actively working on the “convergence process” to make existing standards fully compatible as soon as practicable.

Theory
In theory, IFRS are more principles-based than the detailed guidance provided by US GAAP (fewer bright lines). An example of “bright lines” is the detailed criteria for lease capitalization provided by the 90% of fair value and the 75% of useful life rules.
SEC RULES FOR TRANSITIONING TO IFRS
The SEC currently requires two years of comparative information. For example, ABC International wants their first reporting date to be December 31, Year 5. The first transaction date will be January 1, Year 4. On December 31, Year 5, ABC will report three balance sheets: January 1, Year 4; December 31, Year 4; December 31, Year 5 and two income statements for years 4 and 5. In its preparation of its January 1, Year 4 initial balance sheet, ABC may adopt a “fresh start” approach. This means that ABC is not required to continue with the accounting polices used under prior GAAP. This is true even if that policy is in compliance with IFRS. For example, if ABC had previously used the FIFO inventory method, it could switch the weighted average inventory method for its January 1, Year 4 Balance Sheet.

IFRS INTRODUCTION SUMMARY

<table>
<thead>
<tr>
<th>Common Terms</th>
<th>IFRS</th>
<th>US GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Making Board</td>
<td>IASB International Accounting Standards Board</td>
<td>FASB Financial Accounting Standards Board</td>
</tr>
<tr>
<td>SEC Transitioning Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Balance Sheets</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2 Income Statements</td>
<td>Principles-Based</td>
<td>More detailed based</td>
</tr>
<tr>
<td>“Fresh Start”</td>
<td></td>
<td>“Bright lines”</td>
</tr>
<tr>
<td>Theory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Why Switch to IFRS?</td>
<td>Comparability between countries</td>
<td>NA</td>
</tr>
</tbody>
</table>
Chapter One
Partnerships Questions

INCOME DISTRIBUTION

1. The partnership agreement of Donn, Eddy, and Farr provides for annual distribution of profit or loss in the following sequence:
   - Donn, the managing partner, receives a bonus of 10% of profit.
   - Each partner receives 6% interest on average capital investment.
   - Residual profit or loss is divided equally.

Average capital investments for 20X8 were:
   Donn $80,000
   Eddy 50,000
   Farr  30,000

What portion of the $100,000 partnership profit for 20X8 should be allocated to Farr?
   a. $28,600
   b. $29,800
   c. $35,133
   d. $41,600

2. Fox, Greg, and Howe are partners with average capital balances during 20X6 of $120,000, $60,000, and $40,000, respectively. Partners receive 10% interest on their average capital balances. After deducting salaries of $30,000 to Fox and $20,000 to Howe, the residual profit or loss is divided equally. In 20X6 the partnership sustained a $33,000 loss before interest and salaries to partners. By what amount should Fox's capital account change?
   a. $7,000 increase.
   b. $11,000 decrease.
   c. $35,000 decrease.
   d. $42,000 increase.

FORMATION OF A PARTNERSHIP

3. On July 1, 20X8, a partnership was formed by Johnson and Smith. Johnson contributed cash. Smith, previously a sole proprietor, contributed property other than cash including realty subject to a mortgage, which was assumed by the partnership. Smith's capital account at July 1, 20X8, should be recorded at
   a. Smith's book value of the property at July 1, 20X8.
   b. Smith's book value of the property less the mortgage payable at July 1, 20X8.
   c. The fair value of the property less the mortgage payable at July 1, 20X8.
   d. The fair value of the property at July 1, 20X8.

4. Roberts and Smith drafted a partnership agreement that lists the following assets contributed at the partnership’s formation:

<table>
<thead>
<tr>
<th>Contributed by</th>
<th>Roberts</th>
<th>Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$20,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>—</td>
<td>15,000</td>
</tr>
<tr>
<td>Building</td>
<td>—</td>
<td>40,000</td>
</tr>
<tr>
<td>Furniture &amp; Equipment</td>
<td>15,000</td>
<td>—</td>
</tr>
</tbody>
</table>

   The building is subject to a mortgage of $10,000, which the partnership has assumed. The partnership agreement also specifies that profits and losses are to be distributed evenly. What amounts should be recorded as capital for Roberts and Smith at the formation of the partnership?
   a. $35,000 $85,000
   b. $35,000 $75,000
   c. $55,000 $55,000
   d. $60,000 $60,000
PARTNERSHIP LIQUIDATION

5. The following balance sheet is for the partnership of Able, Bayer, and Cain which shares profits and losses in the ratio of 4:4:2, respectively.

**Assets**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$20,000</td>
</tr>
<tr>
<td>Other assets</td>
<td>180,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$200,000</td>
</tr>
</tbody>
</table>

**Liabilities and Capital**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Liabilities</td>
<td>$50,000</td>
</tr>
<tr>
<td>Able, Capital</td>
<td>37,000</td>
</tr>
<tr>
<td>Bayer, Capital</td>
<td>65,000</td>
</tr>
<tr>
<td>Cain, Capital</td>
<td>48,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$200,000</td>
</tr>
</tbody>
</table>

The original partnership was dissolved when its assets, liabilities, and capital were as shown on the above balance sheet and liquidated by selling assets in installments. The first sale of noncash assets having a book value of $90,000 realized $50,000, and all cash available after settlement with creditors was distributed. How much cash should the respective partners receive (to the nearest dollar)?

- a. Able $8,000; Bayer $8,000; Cain $4,000.
- b. Able $6,667; Bayer $6,667; Cain $6,666.
- c. Able $0; Bayer $13,333; Cain $6,667.
- d. Able $0; Bayer $3,000; Cain $17,000.

6. The following condensed balance sheet is presented for the partnership of Cooke, Dorry, and Evans who share profits and losses in the ratio of 4:3:3, respectively:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$90,000</td>
</tr>
<tr>
<td>Other assets</td>
<td>820,000</td>
</tr>
<tr>
<td>Cooke, loan</td>
<td>30,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$940,000</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>$210,000</td>
</tr>
<tr>
<td>Evans, loan</td>
<td>40,000</td>
</tr>
<tr>
<td>Cooke, capital</td>
<td>300,000</td>
</tr>
<tr>
<td>Dorry, capital</td>
<td>200,000</td>
</tr>
<tr>
<td>Evans, capital</td>
<td>190,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$940,000</td>
</tr>
</tbody>
</table>

Assume that the assets and liabilities are fairly valued on the balance sheet and the partnership decided to admit Hank as a new partner with a one-fifth interest. No goodwill or bonus is to be recorded. How much should Hank contribute in cash or other assets?

- a. $120,000.
- b. $115,000.
- c. $92,000.
- d. $73,600.

ADMISSION OF A NEW PARTNER

7. The following balance sheet is presented for the partnership of Davis, Wright, and Dover who share profits and losses in the ratio of 5:3:2 respectively:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$60,000</td>
</tr>
<tr>
<td>Other assets</td>
<td>540,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$600,000</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Liabilities</td>
<td>$140,000</td>
</tr>
<tr>
<td>Davis, Capital</td>
<td>280,000</td>
</tr>
<tr>
<td>Wright, Capital</td>
<td>160,000</td>
</tr>
<tr>
<td>Dover, Capital</td>
<td>20,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$600,000</td>
</tr>
</tbody>
</table>

8. Dunn and Grey are partners with capital account balances of $60,000 and $90,000, respectively. They agree to admit Zorn as a partner with a one-third interest in capital and profits, for an investment of $100,000, after revaluing the assets of Dunn and Grey. Goodwill to the original partners should be

- a. $0
- b. $33,333
- c. $50,000
- d. $66,667

Assume that the partners decide to liquidate the partnership. If the other assets are sold for $600,000, how much of the available cash should be distributed to Cooke?

- a. $170,000.
- b. $182,000.
- c. $212,000.
- d. $300,000.
ADMISSION OF A NEW PARTNER
RECORD GOODWILL
PAYMENT OUTSIDE PARTNERSHIP

9. William desires to purchase a one-fourth capital and profit and loss interest in the partnership of Eli, George, and Dick. The three partners agree to sell William one-fourth of their respective capital and profit and loss interests in exchange for a total payment of $40,000. The capital accounts and the respective percentage interests in profits and losses immediately before the sale to William follow:

<table>
<thead>
<tr>
<th></th>
<th>Capital Accounts</th>
<th>Percentage Interests in Profits and Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eli</td>
<td>$80,000</td>
<td>60%</td>
</tr>
<tr>
<td>George</td>
<td>40,000</td>
<td>30%</td>
</tr>
<tr>
<td>Dick</td>
<td>20,000</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>$140,000</td>
<td>100%</td>
</tr>
</tbody>
</table>

All other assets and liabilities are fairly valued and implied goodwill is to be recorded prior to the acquisition by William. Immediately after William's acquisition, what should be the capital balances of Eli, George, and Dick, respectively?

a. $60,000; $30,000; $15,000.

b. $69,000; $34,500; $16,500.

c. $77,000; $38,500; $19,500.

d. $92,000; $46,000; $22,000.

BANKRUPTCY

12. Seco Corp. was forced into bankruptcy and is in the process of liquidating assets and paying claims. Unsecured claims will be paid at the rate of forty cents on the dollar. Hale holds a $30,000 noninterest-bearing note receivable from Seco collateralized by an asset with a book value of $35,000 and a liquidation value of $5,000. The amount to be realized by Hale on this note is

a. $5,000

b. $12,000

c. $15,000

d. $17,000

BONUS DISTRIBUTION

13. Ral Corp. has an incentive compensation plan under which a branch manager receives 10% of the branch's income after deduction of the bonus but before deduction of income tax. Branch income for 20X8 before the bonus and income tax was $165,000. The tax rate was 30%. The 20X8 bonus amounted to

a. $12,600

b. $15,000

c. $16,500

d. $18,000
14. Malcolm Corporation has an incentive compensation plan under which the sales manager receives a bonus equal to 10% of the company's income after deducting income taxes, but before deducting the bonus. Income before income tax and the bonus is $100,000. The effective income tax rate is 40%. How much is the bonus:
   a. $5,400.
   b. $6,000.
   c. $6,250.
   d. $10,000.

REVIEW QUESTIONS

15. Kern and Pate are partners with capital balances of $60,000 and $20,000, respectively. Profits and losses are divided in the ratio of 60:40. Kern and Pate decided to form a new partnership with Grant, who invested land valued at $15,000 for a 20% capital interest in the new partnership. Grant's cost of the land was $12,000. The partnership elected to use the bonus method to record the admission of Grant into the partnership. Grant's capital account should be credited for:
   a. $12,000
   b. $15,000
   c. $16,000
   d. $19,000

16. Pat, Helma, and Diane are partners with capital balances of $50,000, $30,000, and $20,000, respectively. The partners share profits and losses equally. For an investment of $50,000 cash, MaryAnn is to be admitted as a partner with a one-fourth interest in capital and profits. Based on this information, the amount of MaryAnn's investment can best be justified by which of the following?
   a. MaryAnn will receive a bonus from the other partners upon her admission to the partnership.
   b. Assets of the partnership were overvalued immediately prior to MaryAnn's investment.
   c. The book value of the partnership's net assets was less than their fair value immediately prior to MaryAnn's investment.
   d. MaryAnn is apparently bringing goodwill into the partnership and her capital account will be credited for the appropriate amount.

17. Abel and Carr formed a partnership and agreed to divide initial capital equally, even though Abel contributed $100,000 and Carr contributed $84,000 in identifiable assets. Under the bonus approach to adjust the capital accounts, Carr's unidentifiable asset should be debited for:
   a. $46,000
   b. $16,000
   c. $8,000
   d. $0

18. Cor-Eng Partnership was formed on January 2, 20X4. Under the partnership agreement, each partner has an equal initial capital balance accounted for under the goodwill method. Partnership net income or loss is allocated 60% to Cor and 40% to Eng. To form the partnership, Cor originally contributed assets costing $30,000 with a fair value of $60,000 on January 2, 20X4, while Eng contributed $20,000 in cash. Drawings by the partners during 20X4 totaled $3,000 by Cor and $9,000 by Eng. Cor-Eng's 20X4 net income was $25,000. Eng's initial capital balance in Cor-Eng is:
   a. $20,000
   b. $25,000
   c. $40,000
   d. $60,000

19. Allen retired from the partnership of Allen, Beck and Chale. Allen's cash settlement from the partnership was based on new goodwill determined at the date of retirement plus the carrying amount of the other net assets. As a consequence of the settlement, the capital accounts of Beck and Chale were decreased. In accounting for Allen's withdrawal, the partnership could have used the

<table>
<thead>
<tr>
<th></th>
<th>Bonus method</th>
<th>Goodwill method</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>b.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>c.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d.</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
20. The partnership of Jenson, Smith, and Hart share profits and losses in the ratio of 5:3:2, respectively. The partners voted to dissolve the partnership when its assets, liabilities, and capital were as follows:

**Assets**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 40,000</td>
</tr>
<tr>
<td>Other assets</td>
<td>210,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$250,000</td>
</tr>
</tbody>
</table>

**Liabilities and Capital**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Liabilities</td>
<td>$ 60,000</td>
</tr>
<tr>
<td>Jenson, Capital</td>
<td>48,000</td>
</tr>
<tr>
<td>Smith, Capital</td>
<td>72,000</td>
</tr>
<tr>
<td>Hart, Capital</td>
<td>70,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$250,000</td>
</tr>
</tbody>
</table>

The partnership will be liquidated over a prolonged period of time. As cash is available it will be distributed to the partners. The first sale of noncash assets having a book value of $120,000 realized $90,000. How much cash should be distributed to each partner after this sale?

a. Jenson $0; Smith $28,800; Hart $41,200.
b. Jenson $0; Smith $30,000; Hart $40,000.
c. Jenson $35,000; Smith $21,000; Hart $14,000.
d. Jenson $45,000; Smith $27,000; Hart $18,000.

21. Kent Co. filed a voluntary bankruptcy petition on August 15, 20X5, and the statement of affairs reflects the following amounts:

<table>
<thead>
<tr>
<th></th>
<th>Book value</th>
<th>Estimated current value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets pledged with fully secured creditors</td>
<td>$ 300,000</td>
<td>$370,000</td>
</tr>
<tr>
<td>Assets pledged with partially secured creditors</td>
<td>180,000</td>
<td>120,000</td>
</tr>
<tr>
<td>Free assets</td>
<td>420,000</td>
<td>320,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 900,000</td>
<td>$810,000</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Liabilities</td>
<td></td>
</tr>
<tr>
<td>Liabilities with priority</td>
<td>$ 70,000</td>
</tr>
<tr>
<td>Fully secured creditors</td>
<td>260,000</td>
</tr>
<tr>
<td>Partially secured creditors</td>
<td>200,000</td>
</tr>
<tr>
<td>Unsecured creditors</td>
<td>540,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$1,070,000</td>
</tr>
</tbody>
</table>

Assume that the assets are converted to cash at the estimated current values and the business is liquidated. What amount of cash will be available to pay unsecured nonpriority claims?

a. $240,000
b. $280,000
c. $320,000
d. $360,000

22. On June 30, the balance sheet for the partnership of Williams, Brown and Lowe together with their respective profit and loss ratios was as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets, at cost</td>
<td>$300,000</td>
</tr>
<tr>
<td>Williams, loan</td>
<td>$ 15,000</td>
</tr>
<tr>
<td>Williams, capital (20%)</td>
<td>70,000</td>
</tr>
<tr>
<td>Brown, capital (20%)</td>
<td>65,000</td>
</tr>
<tr>
<td>Lowe, capital (60%)</td>
<td>150,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$300,000</td>
</tr>
</tbody>
</table>

Williams has decided to retire from the partnership and by mutual agreement the assets are to be adjusted to their fair value of $360,000 at June 30. It was agreed that the partnership would pay Williams $102,000 cash for his partnership interest exclusive of his loan which is to be repaid in full. No goodwill is to be recorded in this transaction. After William's retirement what are the capital account balances of Brown and Lowe, respectively?

a. $65,000 and $150,000.
b. $72,000 and $171,000.
c. $73,000 and $174,000.
d. $77,000 and $186,000.

23. James Dixon, a partner in an accounting firm, decided to withdraw from the partnership. Dixon's share of the partnership profits and losses was 20%. Upon withdrawing from the partnership he was paid $74,000 in final settlement for his interest. The total of the partners' capital accounts before recognition of partnership goodwill prior to Dixon's withdrawal was $210,000. After his withdrawal the remaining partners' capital accounts, excluding their share of goodwill, totaled $160,000. The total agreed upon goodwill of the firm was

a. $120,000
b. $140,000
c. $160,000
d. $250,000

24. The following condensed balance sheet is presented for the partnership of Fisher, Taylor and Simon who share profits and losses in the ratio of 6:2:2, respectively:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 40,000</td>
</tr>
<tr>
<td>Other assets</td>
<td>140,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$180,000</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Liabilities</td>
<td>$ 70,000</td>
</tr>
<tr>
<td>Fisher, capital</td>
<td>50,000</td>
</tr>
<tr>
<td>Taylor, capital</td>
<td>50,000</td>
</tr>
<tr>
<td>Simon, capital</td>
<td>10,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$180,000</td>
</tr>
</tbody>
</table>
The assets and liabilities are fairly valued on the above balance sheet, and it was agreed to by all the partners that the partnership would be liquidated after selling the other assets. What would each of the partners receive at this time if the other assets are sold for $80,000?

<table>
<thead>
<tr>
<th></th>
<th>Fisher</th>
<th>Taylor</th>
<th>Simon</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>$12,500</td>
<td>$37,500</td>
<td>$0</td>
</tr>
<tr>
<td>b.</td>
<td>$13,000</td>
<td>$37,000</td>
<td>$0</td>
</tr>
<tr>
<td>c.</td>
<td>$14,000</td>
<td>$38,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>d.</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

25. Kamy Corp. is in liquidation under Chapter 7 of the Federal Bankruptcy Code. The bankruptcy trustee has established a new set of books for the bankruptcy estate. After assuming custody of the estate, the trustee discovered an unrecorded invoice of $1,000 for machinery repairs performed before the bankruptcy filing. In addition, a truck with a carrying amount of $20,000 was sold for $12,000 cash. This truck was bought and paid for in the year before the bankruptcy. What amount should be debited to estate equity as a result of these transactions?

a. $0
b. $1,000
c. $8,000
d. $9,000

26. Partners C and K share profits and losses equally after each has been credited in all circumstances with annual salary allowances of $15,000 and $12,000, respectively. Under this arrangement, C will benefit by $3,000 more than K in which of the following circumstances?

a. Only if the partnership has earnings of $27,000 or more for the year.
b. Only if the partnership does not incur a loss for the year.
c. In all earnings or loss situations.
d. Only if the partnership has earnings of at least $3,000 for the year.

27. The Wisper Company provides an incentive compensation plan under which its president is to receive a bonus equal to 10% of the company's income in excess of $100,000 before deducting income tax but after deducting the bonus. If income before income tax and bonus is $320,000 and the effective tax rate is 40%, the amount of the bonus should be

a. $20,000.
b. $22,000.
c. $32,000.
d. $44,000.

28. The Flat and Iron partnership agreement provides for Flat to receive a 20% bonus on profits before the bonus. Remaining profits and losses are divided between Flat and Iron in the ratio of 2 to 3, respectively. Which partner has a greater advantage when the partnership has a profit or when it has a loss?

<table>
<thead>
<tr>
<th></th>
<th>Profit</th>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Flat</td>
<td>Iron</td>
</tr>
<tr>
<td>b.</td>
<td>Flat</td>
<td>Flat</td>
</tr>
<tr>
<td>c.</td>
<td>Iron</td>
<td>Flat</td>
</tr>
<tr>
<td>d.</td>
<td>Iron</td>
<td>Iron</td>
</tr>
</tbody>
</table>

29. Beck, the active partner in Beck & Cris, receives an annual bonus of 25% of partnership net income after deducting the bonus. For the year ended December 31, 1988, partnership net income before the bonus amounted to $300,000. Beck's 1988 bonus should be

a. $56,250
b. $60,000
c. $62,500
d. $75,000

30. The Low and Rhu partnership agreement provides special compensation to Low for managing the business. Low receives a bonus of 15 percent of partnership net income before salary and bonus, and also receives a salary of $45,000. Any remaining profit or loss is to be allocated equally. During 1988, the partnership had net income of $50,000 before the bonus and salary allowance. As a result of these distributions, Rhu's equity in the partnership would be

a. Increase.
b. Not change.
c. Decrease the same as Low's.
d. Decrease.

31. The partnership agreement of Reid and Simm provides that interest at 10% per year is to be credited to each partner on the basis of weighted-average capital balances. A summary of Simm's capital account for the year ended December 31, 20X5, is as follows:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, January 1</td>
<td>$140,000</td>
</tr>
<tr>
<td>Additional investment, July 1</td>
<td>40,000</td>
</tr>
<tr>
<td>Withdrawal, August 1</td>
<td>(15,000)</td>
</tr>
<tr>
<td>Balance, December 31</td>
<td>165,000</td>
</tr>
</tbody>
</table>

What amount of interest should be credited to Simm's capital account for 20X5?

a. $15,250
b. $15,375
c. $16,500
d. $17,250
32. When Mill retired from the partnership of Mill, Yale, and Lear, the final settlement of Mill's interest exceeded Mill's capital balance. Under the bonus method, the excess
   a. Was recorded as goodwill.
   b. Was recorded as an expense.
   c. Reduced the capital balances of Yale and Lear.
   d. Had no effect on the capital balances of Yale and Lear.

33. Able Co. provides an incentive compensation plan under which its president receives a bonus equal to 10% of the corporation's income before income tax but after deduction of the bonus. If the tax rate is 40% and net income after bonus and income tax was $360,000, what was the amount of the bonus?
   a. $36,000
   b. $60,000
   c. $66,000
   d. $90,000

35. Instead of admitting a new partner, Alfa and Beda decide to liquidate the partnership. If other assets are sold for $500,000, what amount of the available cash should be distributed to Alfa?
   a. $225,000
   b. $273,000
   c. $327,000
   d. $348,000

36. Eagle and Falk are partners with capital balances of $45,000 and $25,000, respectively. They agree to admit Robb as a partner. After the assets of the partnership are revalued, Robb will have a 25% interest in capital and profits, for an investment of $30,000. What amount should be recorded as goodwill to the original partners?
   a. $0
   b. $5,000
   c. $7,500
   d. $20,000

Items 34 and 35 are based on the following:
The following condensed balance sheet is presented for the partnership of Alfa and Beda, who share profits and losses in the ratio of 60:40, respectively.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$45,000</td>
</tr>
<tr>
<td>Other assets</td>
<td>625,000</td>
</tr>
<tr>
<td>Beda, loan</td>
<td>30,000</td>
</tr>
<tr>
<td></td>
<td>$700,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$120,000</td>
</tr>
<tr>
<td>Alfa, capital</td>
<td>348,000</td>
</tr>
<tr>
<td>Beda, capital</td>
<td>232,000</td>
</tr>
<tr>
<td></td>
<td>$700,000</td>
</tr>
</tbody>
</table>

34. The assets and liabilities are fairly valued on the balance sheet. Alfa and Beda decide to admit Capp as a new partner with a 20% interest. No goodwill or bonus is to be recorded. What amount should Capp contribute in cash or other assets?
   a. $110,000
   b. $116,000
   c. $140,000
   d. $145,000

37. Ayers and Smith formed a partnership on July 1, 20X8. Ayers contributed cash of $50,000. Smith contributed property with a $36,000 carrying amount, a $40,000 original cost, and a fair value of $80,000. The partnership assumed the $35,000 mortgage attached to the property. What should Smith's capital account be on July 1, 20X8?
   a. $36,000
   b. $40,000
   c. $45,000
   d. $80,000

38. After three profitable years, Dodd Co. decided to offer a bonus to its branch manager, Cone, of 25% of income over $100,000 earned by his branch. For Year 2, income for Cone's branch was $160,000 before income taxes and Cone's bonus. Cone's bonus is computed on income in excess of $100,000 after deducting the bonus, but before deducting taxes. What is Cone's bonus for Year 2?
   a. $12,000
   b. $15,000
   c. $25,000
   d. $32,000
Chapter One
Partnerships Problems

NUMBER 1

The partnership of Gary, Jerome, and Paul was formed on January 1, 20X6. The original investments were as follows:

<table>
<thead>
<tr>
<th>Partner</th>
<th>Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gary</td>
<td>$ 80,000</td>
</tr>
<tr>
<td>Jerome</td>
<td>$120,000</td>
</tr>
<tr>
<td>Paul</td>
<td>$180,000</td>
</tr>
</tbody>
</table>

According to the partnership agreement, net income or loss will be divided among the respective partners as follows:

- Salaries of $12,000 for Gary, $10,000 for Jerome, and $8,000 for Paul.
- Interest of 8% on the average capital balances during the year of Gary, Jerome, and Paul.
- Remainder divided equally.

Additional information is as follows:
- Net income of the partnership for the year ended December 31, 20X6, was $70,000.
- Gary invested an additional $20,000 in the partnership on July 1, 20X6.
- Paul withdrew $30,000 from the partnership on October 1, 20X6.
- Gary, Jerome, and Paul made regular drawings against their shares of net income during 20X6 of $10,000 each.

Required:
1. Prepare a schedule showing the division of net income among the three partners. Show supporting computations in good form.
2. Prepare a schedule showing each partner's capital balance at December 31, 20X6. Show supporting computations in good form.

NUMBER 2

On January 1, 20X2, the partners of Allen, Brown, and Cox, who share profits and losses in the ratio of 5:3:2, respectively, decide to liquidate their partnership. The partnership trial balance at this date is as follows:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 18,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>66,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>52,000</td>
</tr>
<tr>
<td>Machinery and equipment, net</td>
<td>189,000</td>
</tr>
<tr>
<td>Allen, loan</td>
<td>30,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td></td>
</tr>
<tr>
<td>Brown, loan</td>
<td>$ 53,000</td>
</tr>
<tr>
<td>Allen, capital</td>
<td>118,000</td>
</tr>
<tr>
<td>Brown, capital</td>
<td>90,000</td>
</tr>
<tr>
<td>Cox, capital</td>
<td></td>
</tr>
<tr>
<td></td>
<td>74,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$355,000</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$355,000</strong></td>
</tr>
</tbody>
</table>
The partners plan a program of piecemeal conversion of assets in order to minimize liquidation losses. All available cash, less an amount retained to provide for future expenses, is to be distributed to the partners at the end of each month. A summary of the liquidation transactions is as follows:

January 20X2:
  a. $51,000 was collected on accounts receivable; the balance is uncollectible.
  b. $38,000 was received for the entire inventory.
  c. $2,000 liquidation expenses were paid.
  d. $50,000 was paid to outside creditors, after offset of a $3,000 credit memorandum received on January 11, 20X2.
  e. $10,000 cash was retained in the business at the end of the month for potential unrecorded liabilities and anticipated expenses.

February 20X2:
  f. $4,000 liquidation expenses were paid.
  g. $6,000 cash was retained in the business at the end of the month for potential unrecorded liabilities and anticipated expenses.

March 20X2:
  h. $146,000 was received on sale of all items of machinery and equipment.
  i. $5,000 liquidation expenses were paid.
  j. No cash was retained in the business.

Required:
Prepare a schedule to compute safe installment payments to the partners as of January 31, 20X2. Show supporting computations in good form.
Chapter One
Solutions to Partnerships Questions

1. (a)

<table>
<thead>
<tr>
<th></th>
<th>Donn</th>
<th>Eddy</th>
<th>Farr</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonus (10% x $100,000)</td>
<td>$10,000</td>
<td>—</td>
<td>—</td>
<td>$10,000</td>
</tr>
<tr>
<td>Interest (6% Avg. Cap.)</td>
<td>$4,800</td>
<td>$3,000</td>
<td>$1,800</td>
<td>$9,600</td>
</tr>
<tr>
<td>Excess in P/L ratio</td>
<td>$26,800</td>
<td>$26,800</td>
<td>$26,800</td>
<td>$80,400</td>
</tr>
<tr>
<td>Profit distribution</td>
<td>$41,600</td>
<td>$29,800</td>
<td>$28,600</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

2. (a)

Partnership loss before interest and salaries to partners $33,000
Partners' interest on average capital balances
10% ($120,000 + $60,000 + $40,000) 22,000
Partners' salaries ($30,000 + 20,000) 50,000
"Residual" partnership loss $105,000

Change in Fox's Capital Account:
Interest—10% x $120,000 $12,000
Salary 30,000
Share of "residual" partnership loss (35,000)
Increase in Fox's capital $7,000

3. (c) For financial accounting purposes, non-cash contributions are recorded at the fair market value of the net assets contributed as of the date of contribution.

4. (b) For financial accounting purposes, non-cash contributions are recorded at the fair market value of the net assets contributed, as of the date of contribution. The mortgage balance attributable to the building reduces Smith's capital by the amount of the mortgage assumed by the partnership. Even though profits and losses will be split evenly, the capital balances do not need to be in that ratio.

5. (d)

<table>
<thead>
<tr>
<th></th>
<th>Cash</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assets</td>
<td>Liabilities</td>
</tr>
<tr>
<td>Balances</td>
<td>$20,000</td>
<td>$(50,000)</td>
</tr>
<tr>
<td>Sale of Assets</td>
<td>$50,000</td>
<td>$(90,000)</td>
</tr>
<tr>
<td>($40,000 Loss in P/L Ratio)</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Balances</td>
<td>$70,000</td>
<td>$90,000</td>
</tr>
<tr>
<td>Allow for worst possible loss on remaining assets</td>
<td>(90,000)</td>
<td>___</td>
</tr>
<tr>
<td>Payment to creditors</td>
<td>(50,000)</td>
<td>50,000</td>
</tr>
<tr>
<td>Balances</td>
<td>$20,000</td>
<td>___</td>
</tr>
<tr>
<td>Distribution of Cash</td>
<td>(20,000)</td>
<td>___</td>
</tr>
<tr>
<td>Balances</td>
<td>- 0 -</td>
<td>___</td>
</tr>
</tbody>
</table>
### Capital Accounts

<table>
<thead>
<tr>
<th></th>
<th>Able</th>
<th>Bayer</th>
<th>Cain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balances</td>
<td>$(37,000)</td>
<td>$(65,000)</td>
<td>$(48,000)</td>
</tr>
<tr>
<td><strong>Sale of Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>($40,000 Loss in P/L Ratio)</td>
<td>16,000</td>
<td>16,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Balances</td>
<td>$(21,000)</td>
<td>$(49,000)</td>
<td>$(40,000)</td>
</tr>
<tr>
<td><strong>Allow for worst possible loss on remaining assets</strong></td>
<td>36,000</td>
<td>36,000</td>
<td>18,000</td>
</tr>
<tr>
<td><strong>Payment to creditors</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Balances</td>
<td>$15,000</td>
<td>$(13,000)</td>
<td>$(22,000)</td>
</tr>
<tr>
<td><strong>Distribution of Able's deficit</strong></td>
<td>(15,000)</td>
<td>10,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Balances</td>
<td>—</td>
<td>(3,000)</td>
<td>(17,000)</td>
</tr>
<tr>
<td>Distribution of cash</td>
<td>—</td>
<td>3,000</td>
<td>17,000</td>
</tr>
<tr>
<td>Balances</td>
<td>-0-</td>
<td>-0-</td>
<td>-0-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Cooke</th>
<th>Dorry</th>
<th>Evans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital balances</td>
<td>$300,000</td>
<td>$200,000</td>
<td>$190,000</td>
</tr>
<tr>
<td>Offset Cooke Loan</td>
<td>(30,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>270,000</td>
<td>200,000</td>
<td>190,000</td>
</tr>
<tr>
<td><strong>Distribution of loss on sale of assets in P/L ratio</strong></td>
<td>(88,000)</td>
<td>(66,000)</td>
<td>(66,000)</td>
</tr>
<tr>
<td>Cash distribution</td>
<td>$182,000</td>
<td>$134,000</td>
<td>$124,000</td>
</tr>
</tbody>
</table>

**NOTE:** Evans' loan account would be offset to capital if his balance were negative; otherwise it would maintain its priority as a liability.

7. (b) $115,000. The investment by Hank must be an amount that, when added to the present capital, represents one-fifth of the new total capital. This can be expressed as follows (NC = new capital):

\[
\frac{1}{5} \text{NC} + 460,000 = \text{NC} \\
460,000 = \frac{4}{5} \text{NC} \\
\text{NC} = 575,000
\]

New capital $575,000 - old capital $460,000 = $115,000.

8. (c) $50,000

Implied value of new partnership:

- New partner's investment: $100,000
- Multiple of interest acquired (1/3) \( \times \frac{3}{3} \)
- $300,000

Less capital balance before recognition of goodwill:
- Dunn: $60,000
- Grey: 90,000
- Zorn (new partner): 100,000

Goodwill to original partners: $50,000
9. (b) Purchase of an Interest

\[ X = \text{Total Capital of new partnership} \]
\[ \frac{1}{4}X = \$40,000 \text{ (William's payment)} \]
\[ X = \$160,000 \]

\[
\begin{array}{l}
\text{Total capital of new partnership} \quad \$160,000 \\
\text{Less: Total capital of old partnership} \quad \$140,000 \\
\text{Implied Goodwill} \quad \$20,000 \\
\end{array}
\]

<table>
<thead>
<tr>
<th></th>
<th>Eli</th>
<th>George</th>
<th>Dick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Balances</td>
<td>$80,000</td>
<td>$40,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Implied Goodwill ($20,000 in P/L Ratio)</td>
<td>12,000</td>
<td>6,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Total</td>
<td>$92,000</td>
<td>$46,000</td>
<td>$22,000</td>
</tr>
</tbody>
</table>

Sale—1/4 Interest to Williams

<table>
<thead>
<tr>
<th></th>
<th>Eli</th>
<th>George</th>
<th>Dick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Balances after Sale</td>
<td>$69,000</td>
<td>$34,500</td>
<td>$16,500</td>
</tr>
</tbody>
</table>

Journal Entries for #2:

1) Goodwill $20,000
   
   Eli, Capital $12,000
   George, Capital 6,000
   Dick, Capital 2,000
   To record implied goodwill in P/L Ratio.

2) Eli, Capital $23,000
   George, Capital 11,500
   Dick, Capital 5,500
   Williams, Capital $40,000
   To record acquisition of 1/4 interest by Williams.

10. (c) Reed capital $40,000
    
    Quinn capital 20,000
    Poe's contribution 17,000
    Total capital (New) $77,000
    Poe's interest in capital \( \times \frac{1}{5} \)
    Poe's capital balance $15,400

    NOTE: Bonus to old partners of $1,600 would result as Poe contributed $17,000; however only received a capital balance of $15,400.

11. (c) Carter's capital ($180,000 \( \times \frac{1}{3} \)) $60,000
    
    Carter's investment 50,000
    Bonus to Carter 10,000
    
    Bonus to Carter is shared by the old partners in their P/L ratio (Ames, 3/5; Buell, 2/5).

    |       | Ames   | Buell  | Carter |
    |-------|--------|--------|--------|
    | Original capital balances | $70,000 | $60,000 | —      |
    | Carter's investment       |        |        | $50,000|
    | Bonus to Carter           | (6,000) | (4,000) | 10,000 |
    | New capital balances      | $64,000 | $56,000 | $60,000|

    NOTE: Only Ames new capital balance needs to be computed as it is different for each of the possible answers.
12. (c) $15,000.
   Realized on secured credit
   Liquidation value of collateral $  5,000
   Realized on unsecured credit
   Total claim $30,000
   Less amount secured – 5,000
   Unsecured claim $25,000
   Percent payment on unsecured credit  × 40%
   Payment on unsecured claim 10,000
   Total amount realized $15,000

13. (b) Bonus = 10% (NIBT – B)
    B = .1 ($165,000 – B)
    B = $16,500 – .1B
    1.1B = $16,500
    B = $16,500 + 1.1
    B = $15,000

14. (c) Bonus = .10 (100,000 – T)
    Taxes = .40 (100,000 – B)
    B = .10 (100,000 – .4 (100,000 – B) )
    B = .10 (100,000 – 40,000 + .4B)
    B = 10,000 – 4,000 + .04B
    .96B = 6,000
    B = 6,250

15. (d) Under the bonus method, the new partner’s capital account is credited for 20% of the new balance of total capital. The new total capital is $95,000 ($60,000 + $20,000 + $15,000). Grant’s capital balance will be 20% × $95,000, or $19,000. The bonus to Grant of $4,000 ($19,000 capital balance – $15,000 contribution) will be charged against the old partners capital accounts according to their profit and loss ratio.

16. (c) Total capital after admittance of new partner $150,000
    $150,000 × 1/4 = $37,500
    Investment for 1/4 interest = $50,000

MaryAnn paid $50,000 for assets with a net book value of $37,500. Therefore, the book value of the partnership's net assets must have been less than their fair value at the time of her admittance.

17. (d) $0. Under the bonus method an unidentifiable asset (goodwill) is not recorded, rather partners' capital balances are adjusted (bonus) to reflect their proper interest in capital.

18. (d) Under the partnership agreement, each partner has an equal initial capital balance, and goodwill is to be recognized. Cor’s original capital balance will be $60,000, the fair market value of the net assets contributed as of the date of contribution. Therefore, Eng’s original capital balance will be $60,000, an equal amount, and goodwill of $40,000 will be attributed to Eng ($60,000 capital – $20,000 cash contribution).

19. (d) Under the bonus method the capital accounts of the non-retiring partners are charged (in proportion to their P & L ratios) for the distribution to the retiring partner in excess of the retiring partner’s capital balance (the bonus).

   Under the goodwill method, the inherent goodwill (or at least the portion attributable to the retiring partner) is recorded, increasing the retiring partner's capital balance to an amount equal to the retirement distribution. The capital balances of the non-retiring partners would not be decreased by the retirement of a partner, but would be increased if all inherent goodwill were recorded.
20. (a) Prepare cash distribution plan as follows:

<table>
<thead>
<tr>
<th></th>
<th>Jenson (5)</th>
<th>Smith (3)</th>
<th>Hart (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital balances</td>
<td>48,000</td>
<td>72,000</td>
<td>70,000</td>
</tr>
<tr>
<td>Loss to eliminate weakest partner</td>
<td>(48,000)</td>
<td>28,800</td>
<td>19,200</td>
</tr>
<tr>
<td>—0—</td>
<td>43,200</td>
<td>50,800</td>
<td></td>
</tr>
</tbody>
</table>

Loss to eliminate next weakest partner

\[43,200 \div .6 = 43,200 \div 0.6 = 72,000 \]

Cash available:

<table>
<thead>
<tr>
<th></th>
<th>$40,000</th>
<th>90,000</th>
<th>$130,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance</td>
<td>$40,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds</td>
<td>$90,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less: Liabilities</td>
<td>60,000</td>
<td></td>
<td>$70,000</td>
</tr>
</tbody>
</table>

Total: $22,000 to H

Next $48,000—3/5 to S; 2/5 to H or $28,800 to S; $19,200 to H.

Total: S—$28,800; H—$19,200 + 22,000 = $41,200

21. (d) $360,000

Total cash from sale of assets $810,000

Less distributions to:

<table>
<thead>
<tr>
<th></th>
<th>$70,000</th>
<th>260,000</th>
<th>$120,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liabilities with priority</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fully secured creditors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partially secured creditors (limited to)</td>
<td>120,000</td>
<td>450,000</td>
<td></td>
</tr>
<tr>
<td>proceeds from security-pledged assets</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cash available for unsecured, non-priority claims $360,000

*Claim of partially secured creditors in excess of security, $80,000 (200,000 claim – 120,000 assets pledged), would be an unsecured liability (claim).

22. (b)

<table>
<thead>
<tr>
<th></th>
<th>Williams</th>
<th>Brown</th>
<th>Lowe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original capital balances</td>
<td>$70,000</td>
<td>$65,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>$60,000 Asset write-up in P/L ratio.</td>
<td>12,000</td>
<td>12,000</td>
<td>36,000</td>
</tr>
<tr>
<td>$82,000</td>
<td>$77,000</td>
<td>$186,000</td>
<td></td>
</tr>
</tbody>
</table>

Bonus to Williams ($102,000 – $82,000)
distributed in P/L ratio of remaining partners (2/8, 6/8)

<table>
<thead>
<tr>
<th></th>
<th>102,000</th>
<th>(7,000)</th>
<th>(15,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000</td>
<td>5,000</td>
<td>(15,000)</td>
<td></td>
</tr>
<tr>
<td>$102,000</td>
<td>$72,000</td>
<td>$171,000</td>
<td></td>
</tr>
</tbody>
</table>

Cash payment (102,000)

<table>
<thead>
<tr>
<th></th>
<th>—0—</th>
<th>$72,000</th>
<th>$171,000</th>
</tr>
</thead>
</table>

23. (a)

Total capital before goodwill and withdrawal $210,000

Total capital before goodwill after withdrawal (160,000)

Capital attributable to Dixon $50,000

Payment to Dixon (74,000)

Goodwill attributed to Dixon $24,000

Dixon P/L ratio .20

<table>
<thead>
<tr>
<th></th>
<th>—0—</th>
<th>120,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total goodwill</td>
<td>$120,000</td>
<td></td>
</tr>
</tbody>
</table>
24. (a)

<table>
<thead>
<tr>
<th>Original capital balances</th>
<th>Fisher</th>
<th>Taylor</th>
<th>Simon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$50,000</td>
<td>$50,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Loss on sale of assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>distributed in P/L ratio</td>
<td>(36,000)</td>
<td>(12,000)</td>
<td>(12,000)</td>
</tr>
<tr>
<td></td>
<td>$14,000</td>
<td>$38,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>Distribution of Simon's deficit</td>
<td>(1,500)</td>
<td>(500)</td>
<td>2,000</td>
</tr>
<tr>
<td>(6/8, 2/8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ending capital balances</td>
<td>$12,500</td>
<td>$37,500</td>
<td>—</td>
</tr>
</tbody>
</table>

25. (d) Both an unrecorded invoice for repairs (an expense) and the sale of an asset below its carrying value would result in a reduction of "estate equity" for a business liquidating under Chapter 7 of the Federal Bankruptcy Code. Voluntary or involuntary bankruptcy proceedings under Chapter 7 of the Federal Bankruptcy Code (liquidation), creates an “estate” for the liquidating entity which consists of the entity’s assets and is administered by a trustee.

26. (c) Partners C and K are always credited or charged with the same amount of profit and loss, and C's salary is always $3,000 greater than K's. Therefore, C will benefit $3,000 more than K in all earnings or loss situations.

27. (a) 

\[
X = \text{Net income applicable to 10% bonus} \\
X = \$320,000 - \$100,000 - 10\%X \\
X = \$220,000 - 10\%X \\
110\% X = \$220,000 \\
X = \$200,000 \\
\text{Bonus} = 10\%X \\
\text{Bonus} = \$20,000 (10\% of net income in excess of $100,000 before tax, after bonus) \text{ or} \\
B = .10 (\text{Net income before taxes} - \$100,000) \\
B = .10 (\$320,000 - \text{Bonus} - \$100,000) \\
B = \$32,000 - .1B - \$10,000 \\
1.1 B = \$22,000 \\
B = \$20,000
\]

28. (b) Flat has the greater advantage when the partnership has a profit or a loss. When the partnership has a profit, Flat would be allocated 52% of the profits [a 20% bonus plus 32% (40% of the remaining 80% of profits)]. When the partnership has a loss, Flat would be allocated only 40% of the loss (2/5ths).

29. (b) 

\[
\text{Bonus} = 25\% (\text{Net income} - \text{Bonus}) \\
B = .25 (\$300,000 - \text{Bonus}) \\
B = \$75,000 - .25 \text{ Bonus} \\
1.25B = \$75,000 \\
B = \$60,000
\]

30. (d) Low's 15% bonus and salary exceed the partnership net income, resulting in a $2,500 "loss" to be distributed equally to Low and Rhu.

Distribution of partnership income:

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Rhu</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonus (15% × $50,000)</td>
<td>$ 7,500</td>
<td>—</td>
<td>$ 7,500</td>
</tr>
<tr>
<td>Salary</td>
<td>45,000</td>
<td>—</td>
<td>45,000</td>
</tr>
<tr>
<td>Excess in P&amp;L ratio</td>
<td>(1,250)</td>
<td>(1,250)</td>
<td>(2,500)</td>
</tr>
<tr>
<td>Profit distribution</td>
<td>$51,250</td>
<td>$(1,250)</td>
<td>$50,000</td>
</tr>
</tbody>
</table>
31. (b) $15,375.

Computation of weighted-average capital balance:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance 1/1</td>
<td>$140,000</td>
</tr>
<tr>
<td>+ additional investment 7/1 ($40,000 × ½ year)</td>
<td>20,000</td>
</tr>
<tr>
<td>– withdrawal 8/1 ($15,000 × 5/12 year)</td>
<td>– 6,250</td>
</tr>
<tr>
<td>Average capital balance</td>
<td>$153,750</td>
</tr>
</tbody>
</table>

"Interest" credited to Simm's capital:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average capital balance</td>
<td>$153,750</td>
</tr>
<tr>
<td>Rate</td>
<td>× 10%</td>
</tr>
<tr>
<td></td>
<td>$15,375</td>
</tr>
</tbody>
</table>

32. (c) Under the "Bonus Method", Distributions to retiring partners in excess of their capital balance are charged against the other partners capital accounts in proportion to their profit and loss ratios.

33. (b) $60,000. As the tax rate is 40%, net income after bonus and taxes ($360,000) is 60% of net income after bonus before taxes.

\[
60\% \times (\text{NIBT} - B) = 360,000 \\
\text{NIBT} - B = 360,000 \div 60\% \\
\text{NIBT} - B = 600,000 \\
\text{Bonus} = 10\% \times \$600,000 \\
\text{Bonus} = \$60,000
\]

34. (d) $145,000. The investment by Capp must be an amount that, when added to the present capital ($580,000), represents one-fifth of the new total capital. This can be expressed as follows (NC = New Capital):

\[
\text{NC} = $580,000 + 1/5 \text{NC} \\
\frac{4}{5} \text{NC} = 580,000 \\
\text{NC} = 725,000 \\
\text{New Capital} = \$725,000 \\
\text{Old Capital} = \$580,000 \\
\text{Investment by Capp} = \$145,000
\]

35. (b) $273,000.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Capital balances</td>
<td>$348,000</td>
</tr>
<tr>
<td>Loss on sale of Assets</td>
<td>$232,000</td>
</tr>
<tr>
<td>distributed in P/L ratio</td>
<td>(75,000)</td>
</tr>
<tr>
<td></td>
<td>(50,000)</td>
</tr>
<tr>
<td>Ending Capital balances</td>
<td>$273,000</td>
</tr>
<tr>
<td></td>
<td>$182,000</td>
</tr>
</tbody>
</table>

Beda's loan would be offset against Beda's Capital balance.

36. (d) Robb's investment of $30,000 for a 25% partnership interest represents an objective basis for the determination of the fair value of the partnership and for the calculation of goodwill. If $30,000 is 25% of the fair value of the partnership, then the total fair value is $120,000 ($30,000 / 25%). The difference between the fair value of the partnership ($120,000) and the total book value of the three partner's capital of $100,000 ($45,000 + $25,000 + $30,000) is goodwill of $20,000.
37. (c) The solution approach would be to prepare the journal entry to form the partnership.

<table>
<thead>
<tr>
<th>JE</th>
<th>Cash</th>
<th>50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Property</td>
<td>80,000</td>
</tr>
<tr>
<td>Mortgage Payable</td>
<td></td>
<td>35,000</td>
</tr>
<tr>
<td>Ayers, capital</td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td>Smith, capital</td>
<td></td>
<td>45,000</td>
</tr>
</tbody>
</table>

38. (a) The key points are that the bonus is before taxes so taxes are irrelevant and the bonus is calculated on $60,000 which is the amount of the income above $100,000. The formula is as follows:

\[ B = 25\% \times (60,000 - B) \]

\[ B = 0.25 \times 60,000 - 0.25B \]

\[ 1.25B = 15,000 \]

\[ B = \frac{15,000}{1.25} \]

\[ B = 12,000 \]
Chapter One
Solutions to Partnerships Problems

NUMBER 1

Partnership of Gary, Jerome, and Paul
DIVISION OF NET INCOME
For the Year Ended December 31, 20X6

<table>
<thead>
<tr>
<th></th>
<th>Gary</th>
<th>Jerome</th>
<th>Paul</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$12,000</td>
<td>$10,000</td>
<td>$8,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Interest on average capital balances (Schedule 1)</td>
<td>7,200</td>
<td>9,600</td>
<td>13,800</td>
<td>30,600</td>
</tr>
<tr>
<td></td>
<td>19,200</td>
<td>19,600</td>
<td>21,800</td>
<td>60,600</td>
</tr>
<tr>
<td>Remainder divided equally</td>
<td>3,133</td>
<td>3,133</td>
<td>3,134</td>
<td>9,400</td>
</tr>
<tr>
<td>Division of net income</td>
<td>$22,333</td>
<td>$22,733</td>
<td>$24,934</td>
<td>$70,000</td>
</tr>
</tbody>
</table>

Partnership of Gary, Jerome and Paul
CAPITAL BALANCES
December 31, 20X6

<table>
<thead>
<tr>
<th></th>
<th>Gary</th>
<th>Jerome</th>
<th>Paul</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 20X6</td>
<td>$80,000</td>
<td>$120,000</td>
<td>$180,000</td>
<td>$380,000</td>
</tr>
<tr>
<td>Additional investment</td>
<td>20,000</td>
<td>—</td>
<td>—</td>
<td>20,000</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>—</td>
<td>—</td>
<td>(30,000)</td>
<td>(30,000)</td>
</tr>
<tr>
<td>Net income</td>
<td>22,333</td>
<td>22,733</td>
<td>24,934</td>
<td>70,000</td>
</tr>
<tr>
<td>Regular drawings</td>
<td>(10,000)</td>
<td>(10,000)</td>
<td>(10,000)</td>
<td>(30,000)</td>
</tr>
<tr>
<td>Balance at December 31, 20X6</td>
<td>$112,333</td>
<td>$132,733</td>
<td>$164,934</td>
<td>$410,000</td>
</tr>
</tbody>
</table>

Schedule 1 — Computation of Interest on Average Capital Balances

Gary:
- $80,000 × 8% for 6 months: $3,200
- $100,000 × 8% for 6 months: $4,000

Jerome:
- $120,000 × 8%: 9,600

Paul:
- $180,000 × 8% for 9 months: 10,800
- $150,000 × 8% for 3 months: 3,000

Total: $30,600
Allen, Brown, and Cox Partnership

COMPUTATION OF SAFE INSTALLMENT PAYMENTS TO PARTNERS
January 31, 20X2

Residual Equities

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Allen</th>
<th>Brown</th>
<th>Cox</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit and loss ratio</td>
<td>100%</td>
<td>50%</td>
<td>30%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Computation of January installment

Preliquidation balances
- Capital: $282,000 | $118,000 | $90,000 | $74,000
- Add (deduct) loans: (10,000) | (30,000) | 20,000 | —

Deduct January losses (Schedule 1)
- (28,000) | (14,000) | (8,400) | (5,600)

Predistribution balances
- 244,000 | 74,000 | 101,600 | 68,400

Deduct potential losses (Schedule 1)
- (199,000) | (99,500) | (59,700) | (39,800)

Deduct potential loss — Allen's debit balance (Brown 3/5; Cox 2/5)
- — | 25,500 | (15,300) | (10,200)

Safe payments to partners
- $45,000 | $0 | $26,600 | $18,400

Schedule 1

Computation of Actual and Potential Liquidation Losses
January 20X2

<table>
<thead>
<tr>
<th></th>
<th>Actual losses</th>
<th>Potential losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection of accounts receivable ($66,000 – $51,000)</td>
<td>$15,000</td>
<td></td>
</tr>
<tr>
<td>Sale of inventory ($52,000 – $38,000)</td>
<td>14,000</td>
<td></td>
</tr>
<tr>
<td>Liquidation expenses</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>Gain resulting from January credit memorandum offset against payments to creditors</td>
<td>(3,000)</td>
<td></td>
</tr>
<tr>
<td>Machinery and equipment, net</td>
<td></td>
<td>$189,000</td>
</tr>
<tr>
<td>Potential unrecorded liabilities and anticipated expenses</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$28,000</td>
<td>$199,000</td>
</tr>
</tbody>
</table>
Chapter 1 Simulation Exercise

The partnership of Gary, Jerome, and Paul was formed on January 1, 20X6. The original investments were as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gary</td>
<td>$ 80,000</td>
</tr>
<tr>
<td>Jerome</td>
<td>$120,000</td>
</tr>
<tr>
<td>Paul</td>
<td>$180,000</td>
</tr>
</tbody>
</table>

According to the partnership agreement, net income or loss will be divided among the respective partners as follows:

- Salaries of $12,000 for Gary, $10,000 for Jerome, and $8,000 for Paul.
- Interest of 8% on the average capital balances during the year of Gary, Jerome, and Paul.
- Remainder divided equally.

Additional information is as follows:

- Net income of the partnership for the year ended December 31, 20X6, was $70,000.
- Gary invested an additional $20,000 in the partnership on July 1, 20X6.
- Paul withdrew $30,000 from the partnership on October 1, 20X6.
- Gary, Jerome, and Paul made regular drawings against their shares of net income during 20X6 of $10,000 each.

**Required:**

1. Prepare a schedule showing the division of net income among the three partners. Show supporting computations in good form.
2. Prepare a schedule showing each partner's capital balance at December 31, 20X6. Show supporting computations in good form.
3. Gary, Partner, notices in the distribution in part #1 that he is allocated $12,000 in salary. He is confused because he has not received a check from the partnership. Explain.
Chapter 1 Simulation Solution

Partnership of Gary, Jerome, and Paul
DIVISION OF NET INCOME
For the Year Ended December 31, 20X6

<table>
<thead>
<tr>
<th></th>
<th>Gary</th>
<th>Jerome</th>
<th>Paul</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$12,000</td>
<td>$10,000</td>
<td>$ 8,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Interest on average capital balances (Schedule 1)</td>
<td>7,200</td>
<td>9,600</td>
<td>13,800</td>
<td>30,600</td>
</tr>
<tr>
<td></td>
<td>19,200</td>
<td>19,600</td>
<td>21,800</td>
<td>60,600</td>
</tr>
<tr>
<td>Remainder divided equally</td>
<td>3,133</td>
<td>3,133</td>
<td>3,134</td>
<td>9,400</td>
</tr>
<tr>
<td>Division of net income</td>
<td>$22,333</td>
<td>$22,733</td>
<td>$24,934</td>
<td>$70,000</td>
</tr>
</tbody>
</table>

Partnership of Gary, Jerome and Paul
CAPITAL BALANCES
December 31, 20X6

<table>
<thead>
<tr>
<th></th>
<th>Gary</th>
<th>Jerome</th>
<th>Paul</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 20X6</td>
<td>$ 80,000</td>
<td>$120,000</td>
<td>$180,000</td>
<td>$380,000</td>
</tr>
<tr>
<td>Additional investment</td>
<td>20,000</td>
<td>—</td>
<td>—</td>
<td>20,000</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>—</td>
<td>—</td>
<td>(30,000)</td>
<td>(30,000)</td>
</tr>
<tr>
<td>Net income</td>
<td>22,333</td>
<td>22,733</td>
<td>24,934</td>
<td>70,000</td>
</tr>
<tr>
<td>Regular drawings</td>
<td>(10,000)</td>
<td>(10,000)</td>
<td>(10,000)</td>
<td>(30,000)</td>
</tr>
<tr>
<td>Balance at December 31, 20X6</td>
<td>$112,333</td>
<td>$132,733</td>
<td>$164,934</td>
<td>$410,000</td>
</tr>
</tbody>
</table>

Schedule 1 — Computation of Interest on Average Capital Balances

Gary:
$ 80,000 × 8% for 6 months $ 3,200
$100,000 × 8% for 6 months $ 4,000 $ 7,200

Jerome:
$120,000 × 8% 9,600

Paul:
$180,000 × 8% for 9 months 10,800
$150,000 × 8% for 3 months 3,000 13,800 $30,600

In requirement #1, Gary is allocated $12,000 in salary as a part of the partner’s distribution of the 20X6 net income. In other words, Gary’s capital is credited for $12,000. If Gary wants to take cash out of the business, it is done through the drawing account. Partnerships normally do not pay salaries because there is not an objective basis for the determination of a proper amount. For example, if salaries were paid and the partnership was applying for a loan, the partners may pay themselves low salaries in order to increase net income. On the other hand, the partners may overstate salaries and reduce reported net income to ward off potential suitors interested in a buyout of the partnership.
Chapter Two
Stockholders' Equity and Investments in Stock
Accounting Standards Codification

Chapter 2 includes ASC 215 Statement of Shareholders’ Equity, ASC 320 Investments in Debt and Equity Securities and ASC 505 Equity.

STOCKHOLDERS’ EQUITY:

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Capital Contributed in Excess of Par Value of Stock (C.C. in Excess)
Stock Issued for Less than Par Value
Subscription of Capital Stock
Default on Subscription
Retained Earnings

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Purchased
Acquisition for Purposes Other Than Retirement
Accounting Methods
Retirement of Treasury Stock
Donated Stock

PREFERRED STOCK ............................................................................................ 2-7
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Redemption
Participation in Dividends

COMPUTATION OF BOOK VALUE ..................................................................... 2-8

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Chapter Two - Stockholders' Equity and Investments in Stock: Accounting Standards Codification

ELEMENTS OF STOCKHOLDERS' EQUITY

Contributed Capital:
- Capital Stock (Legal Capital)
- Capital Contributed in Excess of Par or Stated Value

Retained Earnings
Treasury Stock
Accumulated Other Comprehensive Income

Capital Stock
Capital stock can be common or preferred. Preferred stock has one or more preferences over common stock, usual preference is in dividend payment and/or in liquidation. Capital stock is recorded at:

1. Par Value:
   Par value is established in the articles of incorporation and constitutes legal capital. Legal capital is that portion of corporate capital required by state statute to be retained in the business to afford creditors a minimum degree of protection.

2. No-Par Value (Stated Value):
   Stated value can be set by the board of directors when no-par value is established in the articles of incorporation and functions the same as the par value.

3. No-Par Value (No Stated Value):
   Entire proceeds from the issuance of capital stock is credited to the capital stock account and becomes legal capital.

Capital Contributed in Excess of Par Value of Stock (C.C. in Excess)
In published statements this element of stockholders' equity is normally shown under one title; however, separate accounts must be maintained in the accounting records by source. Frequently this account is titled "Additional Paid-In Capital."

This title is used to describe numerous accounts kept for record and statement purposes, such as:
1. Contributions paid in by stockholders and subscribers:
   a. Premiums on par value or stated value stock.
   b. Conversion of convertible bonds or preferred stock.
   c. Forfeited part payments on stock subscriptions.
   d. Assessments on stockholders.
   e. Donations by stockholders, including gifts of assets and forgiveness of indebtedness.
   f. Increments arising from capital stock transactions and changes.
      (1) Donations of stock.
      (2) Purchase and resale of treasury stock at a profit.
      (3) Retirement of stock at a cost less than the amount set up as stated capital.
      (4) Conversion of stock of one class into a smaller amount of stock of another class.
      (5) Reduction of stated or legal capital.
      (6) Issuance of stock dividend recognized at market value which exceeds par.

2. Contributed capital by others, including forgiveness of indebtedness and gifts of assets, such as a plant site given to induce a company to locate in the donor city.

Examples of journal entries for issuance of common stock follow:

Stock Issued at More Than Par or Stated Value
1. 100 shares of $50 par value common issued at $55.
   Cash $5,500
   Common Stock 5,000 (Legal Capital)
   C.C. in Excess 500
2. 100 shares of no-par common, stated value $10, issued at $12.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$1,200</td>
</tr>
<tr>
<td>Common Stock</td>
<td>1,000</td>
</tr>
<tr>
<td>C.C. in Excess</td>
<td>200</td>
</tr>
</tbody>
</table>

3. 200 shares no-par common (no stated value) issued at $12.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$2,400</td>
</tr>
<tr>
<td>Common Stock</td>
<td>2,400</td>
</tr>
</tbody>
</table>

**Stock Issued for Less Than Par Value**

Illegal in some states. Subscribers face contingent liability if corporation becomes insolvent. Contingent liability generally does not pass to subsequent holder unless he had notice or should have known of it. Discount should never be written off against income or retained earnings. It remains open on books. Show on balance sheet as reduction of capital contributed in excess or can be netted against premium received on other shares to arrive at total capital contributed. Because of these factors, stock is rarely issued at a discount.

**Subscription of Capital Stock**

A subscription of capital stock occurs when an investor contracts to purchase stock, making payment(s) in the future. Usually, a partial payment is made at the time of the contract and the stock is **not** issued until final payment has been made. When a subscription contract is made:

1. **Subscriptions Receivable** is debited for the amount of the future payments. Subscriptions receivable is reported as a current asset or as the SEC requires, a contra stockholders’ equity account.
2. **Common or Preferred Stock Subscribed** is credited for the portion of the proceeds representing legal capital. Common or Preferred Stock Subscribed represents a claim against the unissued stock and is reported in stockholders' equity after the issued common or preferred stock.
3. **Additional Paid-in Capital** (in excess of par) is credited for the proceeds in excess of legal capital. Note that the A.P.I.C. is **not** identified as subscribed.

**Example:** A company accepts subscriptions for 100 shares of common stock ($10 par value) at $25 per share. The agreement calls for an initial payment of 20% with the remainder to be paid in 60 days.

Entry to record subscription:

- Cash (20% × $2,500) $  500
- Subscriptions receivable: Common stock 2,000
  - Common stock subscribed (100 × $10 par) $1,000
  - A.P.I.C. in excess of par 1,500

When final payment is received, the following entries would be made:

- Cash $2,000
- Subscriptions receivable: Common stock $2,000

**Default on Subscription**

If a subscriber defaults on the subscription contract the accounting treatment depends upon the state law and/or the agreement. The default could result in:

1. Forfeiture of all amounts paid.
2. Refund of amount paid.
3. Partial refund.
4. Issuance of shares in proportion to amount paid for.
Regardless of which alternative is applied, the subscription receivable, common stock subscribed and A.P.I.C. applicable to the shares which will not be issued must be removed from the accounts. The remaining credit will depend upon the alternative applied. Using the prior example and assuming the subscriber forfeits any amounts paid, the default would be recorded as follows:

- Common stock subscribed: $1,000
- A.P.I.C. in excess of par: 1,500
- Subscription receivable: Common stock: $2,000
- A.P.I.C. defaulted subscriptions: 500

If the subscriber defaulted and was to receive the proportion of shares paid for, the entry would be as follows:

- Common stock subscribed: $1,000
- A.P.I.C. in excess of par: ($1,500 \times 80\%) = 1,200
- Common stock: ($1,000 \times 20\%) = 200
- Subscription receivable: Common stock: 2,000

Shares issued = $500 paid + $25 subscription price = 20 shares. Note that A.P.I.C. in excess of par is charged for the subscribed shares which were not issued (80 shares or 80% of the 100 shares subscribed).

**Retained Earnings**

Retained earnings balance is cumulative net income of a corporation from date of incorporation or reorganization, after deducting losses, distributions to stockholders, transfers to capital accounts, and after accounting for prior period adjustments. Retained earnings include operating profits and other items of net income as included therein by GAAP. Examples of items which are part of net income under GAAP but shown separately on the income statement from operating net income are:

1. Income or loss from discontinued operations
2. Gain or loss on a disposal of a segment of a business
3. Extraordinary items
4. Cumulative effect of a change in method of accounting

Sometimes, portions of the retained earnings of a corporation may have been appropriated for special purposes. This would restrict the payment of dividends from such earnings. Generally, to earmark such appropriations, details would be shown as follows:

**Retained Earnings**

1. Free (or unappropriated)
2. Appropriated
   a. Reserve for contingencies
   b. Reserve for plant extensions, retirement of preferred stock, etc.

The use of the term *reserve* in this manner is the only proper use of term per AICPA Terminology Bulletin No. 1, Par. 59(3).

Reserves for self-insurance may be set up by appropriating retained earnings. As with other appropriations of retained earnings, losses may not be charged thereto. Losses arising from the self-insurance position of the company would be charged to expense with no effect on the reserve for self-insurance.

To set up appropriated retained earnings:

- Retained Earnings: $100,000
- Reserve for Self-Insurance: $100,000

**When the reserve is no longer needed, the entry should be reversed.** Losses should never be charged against reserve accounts.
TREASURY STOCK

Definition
Treasury stock is a corporation's own stock, once issued and fully paid, and later reacquired but not canceled in accordance with a formal procedure specified by law. Treasury stock may be either common or preferred stock, reacquired by donation, purchase or in settlement of a debt. Stock held in treasury has no cash dividend, liquidation, preemptive or voting rights; however, it does participate in stock splits.

Purchased
1. The cost of treasury stock, regardless of par, should be carried as the value of treasury stock as a reduction of stockholders' equity.
2. The total cost of treasury stock carried should also be shown as a restriction of retained earnings in the balance sheet.

STOCKHOLDERS' EQUITY ILLUSTRATION WITH TREASURY STOCK:
Capital Stock:
Authorized and issued, 10,000 shares of $100 par value of which 500 shares are in the treasury $1,000,000
Contributed Capital in Excess of Par Value 150,000
Retained Earnings:
(of which $62,000, representing the cost of treasury stock, is restricted) 784,000
Total $1,934,000
Less: Cost of Treasury Stock 62,000
Total Stockholders' Equity $1,872,000

If cost of treasury stock exceeds the Retained Earnings Account, restrict excess against Contributed Capital in Excess of Par Value.

Acquisition for Purposes Other Than Retirement
• "Gains" on sales of treasury stock not previously accounted for as constructively retired should be credited to capital in excess.
• "Losses" should be charged to capital in excess to the extent that previous net "gains" from sales or retirements of the same class of stock are included therein, otherwise to retained earnings.

Note that the terms "gains" and "losses" are used in connection with describing the transaction; however, treasury stock transactions do not result in net income for financial reporting purposes. Also, treasury stock transactions are not taxable.

• When state law is at variance with GAAP treatment of treasury stock, the accounting should conform to the applicable law. When state laws relating to acquisition of stock restrict retained earnings for payment of dividends or have other effects of a significant nature, these facts should be disclosed.

Accounting Methods
1. Cost (preferable)
2. Par-value or retirement method

Where the "cost" method is used, acquisitions are recorded at cost and the total cost is shown in the balance sheet as a reduction of stockholders' equity. The par-value method, which has theoretical support, results in the shares being recorded at par with the treasury shares shown in the balance sheet as a reduction of capital stock outstanding.

ILLUSTRATIONS: Assume 10,000 shares were originally issued at $15 (par value $10).

<table>
<thead>
<tr>
<th>Cash</th>
<th>C/S</th>
<th>C.C. in Excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>$150,000</td>
<td>100,000</td>
<td>50,000</td>
</tr>
</tbody>
</table>
Application of Cost Method Where 200 Shares Were Reacquired at $18:

<table>
<thead>
<tr>
<th>Treasury Stock</th>
<th>$3,600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>3,600</td>
</tr>
</tbody>
</table>

If resold at the same price, the entry would be reversed.

If 100 shares were resold at $20, the entry would be:

| Cash           | $2,000 |
| Treasury Stock | 1,800  |
| C.C. in excess from treasury stock transaction | 200 |

If the remaining 100 shares were resold at $13:

<table>
<thead>
<tr>
<th>Cash</th>
<th>$1,300</th>
</tr>
</thead>
<tbody>
<tr>
<td>*C.C. in Excess</td>
<td>200</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>300</td>
</tr>
<tr>
<td>Treasury Stock</td>
<td>1,800</td>
</tr>
</tbody>
</table>

*C.C. in excess can be used to the extent that "previous net 'gains' from sales or retirements of the same class are included therein, otherwise to retained earnings."

Application of Par Value Method Using the Same Facts

Under the Par Method the excess of cost of treasury stock over par or stated value:
1. May be allocated between A.P.I.C. and retained earnings. The portion allocated to A.P.I.C. is limited to the sum of: a) the pro rata portion of A.P.I.C. on the same issue; and b) all A.P.I.C. from retirements and net "gains" on the sale of treasury stock of the same issue.
2. May be charged entirely to retained earnings.

An excess of par or stated value over cost shall be credited to additional paid in capital (C.C. in excess).

200 shares reacquired at $18:

| Treasury Stock | $2,000 |
| *C.C. in Excess | 1,000 |
| Retained Earnings | 600 |
| Cash | $3,600 |

*Based on original issue premium of $5 per share.

200 shares reacquired at $15:

| Treasury Stock | $2,000 |
| C.C. in Excess | 1,000 |
| Cash | $3,000 |

200 shares reacquired at $12:

| Treasury Stock | $2,000 |
| C.C. in Excess | 400 |
| Cash | $2,400 |

OR

| C.C. in excess from treasury stock transaction | 600 |
| Cash | $2,400 |

(preferable entry)

100 shares are reissued at $11:

| Cash | $1,100 |
| C.C. in Excess | 100 |
| Treasury Stock | 1,000 |

Reissuance of treasury shares is given the same treatment as any original issue of stock.
**Problem:** Hillside Corporation has 80,000 shares of $50 par value common stock authorized, issued, and outstanding. All 80,000 shares were issued at $55 each. Retained earnings of the company are $160,000. If 1,000 shares of Hillside common were reacquired at $62 and the retirement (par value) method of accounting for treasury stock were used, capital stock would decrease by:

a. $62,000  

b. $55,000  
c. $50,000  
d. $0.

**Answer:** (d) The retirement or par value method does not decrease the number of shares.

**Retirement of Treasury Stock**

When a corporation's stock is retired, or purchased for constructive retirement (with or without an intention to retire the stock formally in accordance with applicable laws):

1. **An excess of purchase price over par or stated value** may be allocated between C.C in excess and retained earnings. The portion of the excess allocated to C.C. in excess should be limited to the sum of:
   
a. All C.C. in excess arising from previous retirements and net "gains" on sales of treasury stock of the same issue, and
   
b. The pro rata portion of C.C. in excess paid in, voluntary transfers of retained earnings, capitalization of stock dividends, etc., on the same issue. For this purpose, any remaining C.C. in excess applicable to issues fully retired (formal or constructive) is deemed to be applicable pro rata to shares of common stock.

Alternatively, the excess may be **charged entirely to retained earnings** in recognition of the fact that a corporation can always capitalize or allocate retained earnings for such purposes.

2. **An excess of par or stated value over purchase price** should be credited to C.C in Excess.

**ILLUSTRATIONS**

**Facts:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000 shares, no-par, $10 stated value issued</td>
<td>$100,000</td>
</tr>
<tr>
<td>Capital Contributed in Excess, Common</td>
<td>20,000</td>
</tr>
<tr>
<td>Capital Contributed in Excess, Common from T/S transactions</td>
<td>1,000</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>40,000</td>
</tr>
<tr>
<td>Treasury Stock, 100 shares at cost</td>
<td>2,500</td>
</tr>
<tr>
<td>Treasury Stock is retired</td>
<td></td>
</tr>
</tbody>
</table>

**Retirement of Treasury Stock**

**Method #1:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Stock, stated value $10</td>
<td>1,000</td>
</tr>
<tr>
<td>C.C. in Excess—T.S. transactions</td>
<td>1,000</td>
</tr>
<tr>
<td>C.C. in Excess—Common</td>
<td>200</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>300</td>
</tr>
<tr>
<td>Treasury Stock</td>
<td>2,500</td>
</tr>
</tbody>
</table>

Shares Retired = 100  
Total Shares = 10,000  

\[
\text{Total Shares} \times \frac{20,000}{\text{C.C. in Excess, Common}} = 200
\]

**Method #2:** (Simplest Method)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Stock, stated value $10</td>
<td>1,000</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>1,500</td>
</tr>
<tr>
<td>Treasury Stock</td>
<td>2,500</td>
</tr>
</tbody>
</table>

Same facts except that Treasury Stock was acquired at $8 per share or $800.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Stock</td>
<td>1,000</td>
</tr>
<tr>
<td>C.C. in Excess</td>
<td>200</td>
</tr>
<tr>
<td>Treasury Stock</td>
<td>800</td>
</tr>
</tbody>
</table>
Donated Stock

General Purpose: Donations may be made to provide stock that may be resold to furnish working capital, to eliminate the water from the stock, to wipe out a deficit, to provide common stock to be given as a bonus to purchasers of a preferred stock, or for other reasons. It may be purchased to buy out a stockholder, or to create a market demand for the stock and thus retard a downward trend in the market value.

If the donated stock is not to be resold, the company should effect a formal reduction of its stated capital.

If the donated stock is to be resold, since the company will part with nothing of value, there is no cost to record in the Treasury Stock account. There would be only a memo entry.

If stock is donated to provide stock that can be sold to raise working capital, no entry other than a memorandum in the Treasury Stock account should be made for the donation. The proceeds of the sale should be credited to C.C. in Excess, Donated Capital.

Retained earnings should never be increased as a result of treasury stock transactions. Cash dividends would not be paid on treasury shares. Stock dividends and stock splits apply to all issued shares, however.

PREFERRED STOCK

Characteristics

a. Fixed dividend rate
b. Preference in liquidation of assets
c. Participating or non-participating. Participation must be stated in problem.
d. Cumulative or non-cumulative.
e. Absence of voting rights

Redemption

What are preferred shares entitled to receive?
Par value
+ Dividends (in arrears if cumulative and any participating dividends)
+ Redemption premium

Conditions of redemption are important. Most preferred shares are entitled to a premium if called (call price, e.g. 105), but may provide no premium in event of liquidation.

Participation in Dividends

Rule #1: When the common stock has a par or stated value, participation is allocated on the aggregate dollar amount of preferred and common stock outstanding. Current dividends should be the same percentage of total par value of each class of stock outstanding.

Problem: Common—$10 par, 20,000 shares $200,000
Preferred—6% cumulative and participating
$100 par, 1,000 shares, 2 years’ dividends in arrears plus the current year 100,000
A $51,000 dividend is to be paid
Preferred in arrears $6,000 × 2 = $12,000
Current dividend 6,000
Common, 1 year at preferred rate 6% × $200,000 = $12,000
Remainder divided based on Rule #1
Preferred 1/3 × $21,000 = $7,000
Common 2/3 × $21,000 = $14,000
Total Dividend $25,000

Rule #2: When the common stock is no-par with no stated value, retained earnings available for participation is based on the number of shares of preferred and common stock outstanding.

Problem: Preferred—6% cumulative and participating, 4,000 shares, $25 par——$100,000
Common—8,000 shares no-par, sold for $250,000
One year's dividends in arrears on the preferred (plus current year)
Common stock gets $1.50 per share dividend (fixed by the Board of Directors)
Retained earnings $51,000

Retained earnings $51,000
2 years' dividends at $6,000 $12,000
Amount to common 8,000 × $1.50 $12,000
Remainder for distribution $27,000

Must be based on number of shares:

<table>
<thead>
<tr>
<th>Preferred</th>
<th>Common</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,000 shares</td>
<td>8,000 shares</td>
</tr>
<tr>
<td>$9,000</td>
<td>$18,000</td>
</tr>
</tbody>
</table>

COMPUTATION OF BOOK VALUE

Stockholders' Equity must be allocated to the various classes of shareholders. If there is only one class of stock, book value is based on the number of shares issued and outstanding. Exclude treasury shares. If preferred shares have redemption premium, allocate to preferred shareholders.

Common and Preferred Book Value Computation

Problem: Preferred—5% cumulative, $100 par, 5,000 shares sold for $800,000
Common—$2 par, 500,000 shares sold for $1,000,000
Retained earnings $200,000
Preferred dividends, 4 years in arrears including current year.
Compute book value.

<table>
<thead>
<tr>
<th></th>
<th>Preferred</th>
<th>Common</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance</td>
<td>$500,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>4 years dividend @ 5%</td>
<td>100,000</td>
<td></td>
</tr>
<tr>
<td>C.C. in Excess—Preferred</td>
<td></td>
<td>300,000</td>
</tr>
<tr>
<td>Balance of Retained Earnings</td>
<td></td>
<td>100,000</td>
</tr>
<tr>
<td>Book Value</td>
<td>$600,000</td>
<td>$1,400,000</td>
</tr>
<tr>
<td>Book Value Per Share</td>
<td>$120.00</td>
<td>$2.80</td>
</tr>
</tbody>
</table>
ILLUSTRATIVE PROBLEM: The balance sheet of Able Company on December 31st contains the following items:

- Provision for Warranty Obligations: $103,732
- Bonds Payable: 500,000
- Reserve for Contingencies: 220,000
- 6% cumulative preferred stock, $50 par (entitled to $55 and accumulated dividends per share liquidation)
- Authorized 6,000 shares, 3,000 shares issued, of which 300 shares are in the treasury: 135,000
- Common stock, $50 par, authorized 20,000 shares—issued and outstanding, 8,000 shares: 400,000
- Premium on preferred stock: 10,000
- Premium on common stock: 78,500
- Retained earnings: 265,000

NOTE: Preferred dividends have been paid or set up as payable through December 31st.

Required: Book value per share—common.
Book value per share—preferred.

SOLUTION TO ILLUSTRATIVE PROBLEM:

<table>
<thead>
<tr>
<th>Preferred</th>
<th>Common</th>
</tr>
</thead>
<tbody>
<tr>
<td>Par</td>
<td>$135,000</td>
</tr>
<tr>
<td>Premium</td>
<td>13,500</td>
</tr>
<tr>
<td>R.E. and Reserve for Contingencies</td>
<td>485,000</td>
</tr>
<tr>
<td>Premium on Preferred</td>
<td>10,000</td>
</tr>
<tr>
<td>Premium on Common</td>
<td>78,500</td>
</tr>
<tr>
<td>Book Value</td>
<td>$148,500</td>
</tr>
<tr>
<td>Book Value Per Share</td>
<td>$55</td>
</tr>
</tbody>
</table>
STOCK DIVIDENDS AND STOCK SPLITS

Neither a stock dividend nor a stock split changes stockholders' equity. Distinction centers mainly on the representations of management as to whether the additional stock being distributed to shareholders is a distribution of earnings (stock dividend) or is an effort to improve the marketability of the stock (stock split).

In ASC 505, a guideline was established that where additional shares were issued, less than 20% or 25% of the total shares outstanding indicated a stock dividend; whereas a distribution in excess of that indicated a stock split. The rationale behind the 20-25% guideline was a study of market action when stock distributions were made, in that "where the number of additional shares issued as a stock dividend is so great that it has ... the effect of materially reducing the share market value ... the transaction clearly partakes of the nature of a stock split-up." Under such circumstances, there is no need to capitalize retained earnings, other than to satisfy legal requirements.

Stock Dividend

If the transaction is a stock dividend, capitalize retained earnings based on fair value of additional shares issued. Example: Common, no-par, $10 stated value; $15 market value, 10,000 shares outstanding. A 2% stock dividend is declared.

| Retained Earnings | 3,000 (FV $15) |
| Capital Stock     | 2,000 ($10 par) |
| C.C. in Excess    | 1,000           |

Stock Split

A stock split, that is, a distribution of additional shares effected to reduce the market price per share, may be recorded in several ways:

1. Stock split with no change in total capital. Requires only a memorandum entry. Example: 100,000 shares of Blue Corp. stock $20 par or stated value split two for one.

<table>
<thead>
<tr>
<th>Old Capital</th>
<th>New Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000 shares @ $20</td>
<td>200,000 shares @ $10</td>
</tr>
<tr>
<td>$2,000,000</td>
<td>$2,000,000</td>
</tr>
</tbody>
</table>

2. A stock split in which retained earnings are capitalized to the extent of the par or stated value of the shares. Example: Same as above except that the par value remains the same. FV is $40 per share.

<table>
<thead>
<tr>
<th>Old Capital</th>
<th>New Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000 shares @ $20</td>
<td>200,000 shares @ $20</td>
</tr>
<tr>
<td>$2,000,000</td>
<td>$4,000,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retained Earnings</th>
<th>C/S</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,000,000</td>
<td>$2,000,000</td>
</tr>
</tbody>
</table>

The Committee on Accounting Procedure of the AICPA recommends that distributions such as the above should not be called a stock dividend, but could be stated as "a split-up effected in the form of a dividend," the main difference being that retained earnings are not capitalized based on fair value.

3. Capital stock must be increased to satisfy legal requirements. Example: Same facts except a 12 for 1 stock split and state law requires a minimum $2 par or stated value.

<table>
<thead>
<tr>
<th>Retained Earnings</th>
<th>Capital Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>$400,000</td>
<td>$400,000</td>
</tr>
</tbody>
</table>

To increase the Capital Stock account to $2,400,000. Shares outstanding increased to 1,200,000 at $2 stated value.

General Rule: If the distribution is 25% or more, retained earnings will not generally be capitalized based on FV. Capitalize retained earnings based on par or stated value. Closely held corporations may capitalize retained earnings in stock dividend situations based on par value instead of fair value.
Exercise: On December 31, 1985, the stockholders' equity section of the balance sheet of Mason Co. was as follows:

- Common stock (par value $1, 1000 shares authorized, 300 shares issued and outstanding) $ 300
- Additional paid-in capital (C.C. in Excess) 1,800
- Retained earnings 2,000

$4,100

On January 2, 1986, the board of directors declared a stock dividend of one share for each three shares owned. Accordingly, 100 additional shares of stock were issued. On January 2, the fair market value of Mason's stock was $10 per share.

The most appropriate presentation of Mason's stockholders' equity on January 2, 1986, following the issuance of the 100 additional shares is:

a. Common stock (par value $1, 1000 shares authorized, 400 shares issued and outstanding) $ 400
   Additional paid-in capital 1,700
   Retained earnings 2,000
   $4,100

b. Common stock (par value $1, 1000 shares authorized, 400 shares issued and outstanding) $ 400
   Additional paid-in capital 1,800
   Retained earnings 1,900
   $4,100

c. Common stock (par value $1, 1000 shares authorized, 400 shares issued and outstanding) $ 400
   Additional paid-in capital 2,700
   Retained earnings 1,000
   $4,100

d. Common stock (par value $1, 1000 shares authorized, 400 shares issued and outstanding) $ 400
   Additional paid-in capital 2,400
   Retained earnings 1,300
   $4,100

Solution: (b), since the distribution exceeds 25%. Answer (c) would be correct if the distribution is considered a stock dividend.
## EXAMPLE: STOCKHOLDERS' EQUITY

GRUBBS CORPORATION  
STOCKHOLDERS' EQUITY  
DECEMBER 31, 20XX

<table>
<thead>
<tr>
<th>Stock Type</th>
<th>Shares</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred Stock 8%—par $100,</td>
<td>1,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>authorized</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Common Stock—par $10, authorized</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>issued</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>outstanding</td>
<td>2,600</td>
<td>30,000</td>
</tr>
</tbody>
</table>

Total Capital Stock $50,000

Paid-in Capital in excess of par -- Common Stock 40,000

Paid-in Capital – Treasury Stock Transactions 5,000

Paid-in Capital – Donations 15,000

Total Additional Paid-in Capital $60,000

Total Contributed Capital $110,000

## RETAINED EARNINGS

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted for Treasury Stock</td>
<td>$10,000</td>
</tr>
<tr>
<td>Not Restricted</td>
<td>150,000</td>
</tr>
</tbody>
</table>

Total Retained Earnings $160,000

Total $270,000

Less: Treasury Stock - Cost of $25 per share (400 shares) $(10,000)

Total $260,000

Accumulated Other Comprehensive Income 75,000

Total Stockholders' Equity $335,000
QUASI-REORGANIZATION OR CORPORATE READJUSTMENT

Quasi-reorganization: A fresh start in an accounting sense.
1. The corporate entity remains intact.
2. Recorded asset values should be readjusted to the fair value.
3. A deficit is eliminated (usually).
4. Facts must be disclosed.

Why Quasi-Reorganization?
Assets may be overvalued and/or the corporation may have a deficit in its retained earnings account. These factors may hinder the corporation's ability to attract investors because dividends are unlikely.

Procedure: Asset write-downs are charged against retained earnings and capital stock adjustments (reductions in legal capital) are transferred to Additional Paid in Capital in Excess of Par Value, then to Retained Earnings, to eliminate any deficit.

The new retained earnings account is dated to show that it runs from the date of the readjustment and should be disclosed in the financial statements until the date no longer has any special significance. Dating would rarely be needed after 10 years and in only exceptional cases should be discontinued in less than 10 years.

ILLUSTRATIVE PROBLEM:
Current conditions warrant that the Austin Company have a quasi-reorganization (corporate readjustment) at December 31, 20X3. Selected balance sheet items prior to the quasi-reorganization (corporate readjustment) are as follows:

- Inventory was recorded in the accounting records at December 31, 20X3, at its market value of $3,000,000.
- Property, plant, and equipment was recorded in the accounting records at December 31, 20X3, at $6,000,000 net of accumulated depreciation.
- Stockholders' equity consisted of:
  - Common stock, par value $10 per share; authorized, issued, and outstanding 350,000 shares $3,500,000
  - Additional paid-in capital 800,000
  - Retained earnings (deficit) (450,000)
  - Total stockholders' equity $3,850,000

Additional information is as follows:

- Inventory cost at December 31, 20X3, was $3,250,000.
- Property, plant, and equipment had a fair value of $4,000,000.
- The par value of the common stock is to be reduced from $10 per share to $5 per share.

Required: Prepare the stockholders' equity section of the Austin Company's balance sheet at December 31, 20X3, as it should appear after the quasi-reorganization (corporate readjustment) has been accomplished. Show supporting computations in good form. Ignore income tax and deferred tax considerations.
SOLUTION:

Austin Company
STOCKHOLDERS’ EQUITY SECTION OF BALANCE SHEET
AFTER QUASI-REORGANIZATION (CORPORATE READJUSTMENT)
December 31, 20X3

Common stock; par value $5 per share; authorized
  issued, and outstanding 350,000 shares       $1,750,000
Additional paid-in capital from reduction in par value
  of common stock (Schedule 1)             100,000
Retained earnings from December 31, 20X3 (Schedule 2)                 -0-
Total stockholders’ equity         $1,850,000

Schedule 1 -- Computation of Additional Paid-In Capital
Balance at December 31, 20X3           $800,000
Reduction in par value of common stock
  (350,000 shares  x  $5 per share)        $1,750,000
Elimination of deficit in retained earnings
  ($450,000  +  $2,000,000)         ( 2,450,000)
Balance at December 31, 20X3, after quasi-reorganization
  (corporate readjustment)            $100,000

Schedule 2 -- Computation of Retained Earnings
Balance (deficit) at December 31, 20X3       $ (450,000)
Writedown of property, plant, and equipment       (2,000,000)
Elimination of deficit in retained earnings          2,450,000
Balance at December 31, 20X3, after quasi-reorganization
  (corporate readjustment)         $          --0--

ASC 320: ACCOUNTING FOR CERTAIN INVESTMENTS IN DEBT AND EQUITY SECURITIES

This statement addresses the accounting and reporting for investments in equity securities that have readily
determinable fair values and all investments in debt securities. The fair value of an equity security is readily
determinable if sales prices are currently available on a registered securities exchange, publicly reported over-the-counter market, or comparable foreign market.

ASC 320 does not apply to 1) investments accounted for under the equity method nor investments in consolidated subsidiaries; 2) enterprises whose specialized accounting practices include accounting for substantially all investments at market or fair value, such as brokers and dealers in securities, defined benefit pension plans and investment companies; 3) not-for-profit organizations.

Requirements:
At acquisition, investments in equity securities with readily determined fair values, and all investments debt
securities must be classified into one of the following three categories and accounted for as follows:

1. Held to Maturity: Debt securities that the entity has the positive intent and ability to hold to maturity are
classified as held-to-maturity securities and are reported at amortized cost.

On a classified balance sheet, individual held-to-maturity securities should be classified as current assets or
noncurrent assets (investments), as appropriate for the individual security.
2. **Trading:** Debt and equity securities that are bought and held principally for the purpose of selling them in the near term are classified as *trading securities* and are reported at *fair value*, with *unrealized holding gains and losses included in earnings*.

All trading securities should be classified as current assets on a classified balance sheet.

3. **Available for Sale:** Debt and equity securities not classified either as held-to-maturity securities or trading securities are classified as *available for sale securities* and are reported at *fair value*.

On a classified balance sheet, individual available-for-sale securities should be classified as current assets or noncurrent assets (investments), as appropriate for the individual security.

**ASC 220**, "Reporting Comprehensive Income," amends **ASC 320** to require that *unrealized holding gains and losses* on securities classified as *available-for-sale* (previously reported as a separate component of stockholders' equity) be reported in comprehensive income as a component of *other comprehensive income*.

**Reporting changes re: Securities classified as Available-for-Sale:**

1. The change in the unrealized holding gain/loss for the period is reported as a component of other comprehensive income in reporting comprehensive income. This includes:
   a. The unrealized holding gain/loss for the period;
   b. Reversal of previously recorded unrealized holding gain/loss for securities sold, (referred to as a reclassification adjustment in the computation of other comprehensive income).

2. The total other comprehensive income for the period is transferred to *accumulated other comprehensive income* which is reported as a separate element of equity. The balance of the unrealized holding gain/loss must be disclosed.

*Refer to Chapter 12 for alternative formats for reporting comprehensive income and disclosure of accumulated other comprehensive income.*

**Transfers Between Categories:**
The transfer of a security between categories must be accounted for at *fair value*. At the date of transfer, a security’s unrealized holding gain or loss is accounted for as follows:

<table>
<thead>
<tr>
<th>Transfer</th>
<th>Required Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Trading</td>
<td>Unrealized holding gain or loss at the date of transfer has already been recognized in earnings and shall <strong>not</strong> be reversed.</td>
</tr>
<tr>
<td>To Trading</td>
<td>Unrealized holding gain or loss at the date of transfer must be recognized in earnings immediately.</td>
</tr>
<tr>
<td>To Available for Sale</td>
<td>Unrealized holding gain or loss at the date of transfer must be recognized as a separate component of other comprehensive income.</td>
</tr>
<tr>
<td>From Held to Maturity</td>
<td>Unrealized holding gain or loss at the date of transfer will continue to be reported as a separate component in stockholders’ equity, but will be amortized over the remaining life of the security as an adjustment of yield (in a manner consistent with the amortization of any premium or discount). The use of fair value to record the transfer of debt securities (to HTM) may create a premium or discount on the investment (fair value vs. face value) that would be amortized as an adjustment of yield (interest income) over the life of the investment. The amortization of the unrealized holding gain or loss will offset or mitigate the effect on interest income of the amortization of such premium or discount.</td>
</tr>
</tbody>
</table>
Impairment of Securities (other than Temporary Declines):
For individual securities classified as Available-for-Sale and Held-to-Maturity, a determination must be made as to whether a decline in fair value below amortized cost basis is other than temporary. If the decline is judged to be other than temporary (permanent), the cost basis of the individual security shall be written down to fair value as a new cost basis and the amount of the write-down will be accounted for as a realized loss (included in earnings for the period). The new cost basis will not be changed for subsequent recoveries in fair value. For securities classified as available-for-sale, subsequent increases and decreases (other than permanent decreases) in fair value will be included in unrealized holding gains and losses reported in the separate component of equity.

Income Recognition

Unrealized holding gains and losses:
- **Trading securities**—included in earnings.
- **Available-for-sale securities** (including those classified as current assets) - excluded from earnings and the current change reported as other comprehensive income and the cumulative changes reported as accumulated other comprehensive income in the stockholders' equity.

Dividend and Interest Income: ASC 320 does not affect the methods used for recognizing and measuring dividend and interest income. Dividends and interest income, including amortization of any premium or discount arising at acquisition, for all three classifications of investments continue to be included in earnings.

Gains and Losses: Realized gains and losses for securities classified as available-for-sale and held-to-maturity continue to be reported in earnings.

Disclosures:

a) As of the date of each balance sheet presented, the following segregated for securities classified as available-for-sale and held-to-maturity:
   1. Aggregate fair value.
   2. Gross unrealized holding gains and losses; and
   3. Amortized cost basis by major security type.

b) As of the date of the most recent balance sheet presented, information about the contractual maturities of debt securities, segregated for securities classified as available-for-sale and held-to-maturity.

c) For each period for which an income statement is presented:
   1. Proceeds from sales of available-for-sale securities and the gross realized gains and losses on those sales.
   2. Basis on which cost was determined for gain or loss computation (specific identification, average, or other).
   3. Gross gains and losses included in earnings from transfers from available-for-sale trading securities.
   4. Change in net unrealized holding gain or loss on available-for-sale securities included as a separate component in other comprehensive income.
   5. Change in net unrealized holding gain or loss on trading securities that has been included in earnings during the period.
   6. For sale or transfer of held-to-maturity securities, the amortized cost, realized or unrealized gain or loss and the circumstances leading to the decision to sell or transfer the securities.

The individual amounts for the three categories of securities do not have to be presented in the balance sheet, if the information is included in the notes to the financial statements.
Overview ASC 320

 Marketable Equity and Debt Securities

Includes:

- All Investments in Debt Securities
- Investments in Equity Securities that have a readily determinable fair value (listed on a publicly reported stock exchange)

CLASSIFICATIONS

TRADING SECURITIES

A. Current Assets
B. Report at Fair Value
C. Unrealized Gains/Losses Are Reported on Income Statement

AVAILABLE FOR SALE SECURITIES

A. Current or Noncurrent Assets
B. Report at Fair Value
C. Unrealized Gains/Losses Are Reported as Other Comprehensive Income and Transferred to Accumulated Other Comprehensive Income, a Stockholders’ Equity Account

HELD TO MATURITY SECURITIES

A. Positive Intent and Ability to Hold to Maturity
B. Current or Noncurrent Assets
C. Report at Carrying Value
D. Amortize Premium or Discount
E. Do Not Record Unrealized Gains or Losses
Example: Marketable Securities

On December 31, 20X3, Tiger Company provided you with the following information regarding its securities:

<table>
<thead>
<tr>
<th>Investment</th>
<th>Cost</th>
<th>Fair Value</th>
<th>Unrealized Gain</th>
<th>Unrealized (Losses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clemson Corp. Stock</td>
<td>$20,000</td>
<td>$19,000</td>
<td></td>
<td>$(1,000)</td>
</tr>
<tr>
<td>Wake Corp. Stock</td>
<td>10,000</td>
<td>9,000</td>
<td></td>
<td>(1,000)</td>
</tr>
<tr>
<td>Tar Heel Stock</td>
<td>20,000</td>
<td>20,500</td>
<td></td>
<td>500</td>
</tr>
<tr>
<td>Total Portfolio</td>
<td>$50,000</td>
<td>$48,500</td>
<td></td>
<td>$(1,500)</td>
</tr>
</tbody>
</table>

Additional Information: During 20X4 the Wake Corp. Stock was sold for $9,600. The fair value of the stocks on December 31, 20X4 were Clemson Stock, $19,200 and Tar Heel Stock, $20,300.

Required:

a. Prepare the adjusting journal entry on December 31, 20X3 assuming the securities are trading securities.
b. Prepare the adjusting journal entry on December 31, 20X3 assuming the securities are available-for-sale securities.
c. Prepare the journal entry to record the sale of the Wake Corp. stock in 20X4.
d. Prepare the adjusting entry needed on December 31, 20X4 assuming
   (1) the securities are trading securities
   (2) the securities are available-for-sale securities
e. Calculate the December 31, 20X4 balance in accumulated other comprehensive income and the securities fair value adjustment accounts for the available-for-sale securities.

Solution:

Trading Securities
20X3
a. Unrealized holding loss 1,500
   Securities fair value adjustment 1,500

Note: unrealized holding losses on the income statement

Retained earnings 1,500
Unrealized holding loss 1,500

To close loss to retained earnings.

20X4
   c. Cash 9,600
      Loss on trading securities 400
      Trading securities (cost) 10,000

20X4
   d. Securities fair value adjustment 1,000
      Unrealized holding gain 1,000

Available-For-Sale Securities
20X3
b. Unrealized holding loss 1,500
   Securities fair value adjustment 1,500

Note: unrealized holding loss is shown as other comprehensive income.

Accumulated other comprehensive income 1,500
Unrealized holding loss 1,500

To transfer loss to other comprehensive income.

20X4
   c. Cash 9,600
      Loss on available-for-sale securities 400
      Trading securities (cost) 10,000

20X4
   d. Securities fair value adjustment 1,000
      Unrealized holding gain 1,000

   Unrealized holding gain 1,000
   Acc.Other Comp. Income 1,000
Details for 20X4 Journal Entries:

<table>
<thead>
<tr>
<th>Investments</th>
<th>Cost</th>
<th>Fair Value</th>
<th>Unrealized Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clemson Corp. Stock</td>
<td>$20,000</td>
<td>$19,200</td>
<td>$ (800)</td>
</tr>
<tr>
<td>Tar Heel Corp. Stock</td>
<td>20,000</td>
<td>20,300</td>
<td>300</td>
</tr>
<tr>
<td>Total portfolio</td>
<td>$40,000</td>
<td>$39,500</td>
<td>$ (500)</td>
</tr>
</tbody>
</table>

Since the required 20X4 balance in the securities fair value adjustment account is a $500 credit, the beginning balance of $1,500 credit must be reduced by a $1,000 debit and an unrealized holding gain recognized.

e. The balance in securities fair value adjustment account would be a $500 credit balance and the accumulated other comprehensive income account would be a $500 debit balance ($1,500 loss in 20X3 less $1,000 gain in 20X4 = $500 balance).

Example: Available-For-Sale Securities with a Reclassification Adjustment.

On December 31, 20X1 the Tar Heel company purchased 2,000 shares of available-for-sale securities at a price of $10 per share. These securities had a fair value of $24,000 on December 31, 20X2 and $30,000 on 20X3. All the securities were sold on January 2, 20X4 when the fair value was still $30,000.

Required: Prepare the journal entries for all the transactions of the Tar Heel Company. (For simplicity ignore the tax effect).

**20X1**

Dec. 31  Investment in available-for-sale securities  $20,000  Cash  $20,000

**20X2**

Dec. 31  Securities fair value adjustment  4,000

Unrealized holding gain on available-for-sale securities  4,000

Note: The unrealized holding gain ($24,000 – $20,000 = $4,000) would appear on the other comprehensive income statement.

Dec. 31  Unrealized holding gain on available-for-sale securities  4,000

Accumulated other comprehensive income  4,000

To transfer the unrealized holding gain to accumulated other comprehensive income, which is a stockholders’ equity account.

**20X3**

Dec. 31  Securities fair value adjustment  6,000

Unrealized holding gain on available-for-sale securities  6,000

Dec. 31  Unrealized holding gain on available-for-sale securities  6,000

Accumulated other comprehensive income  6,000

**20X4**

Jan. 2  Cash  30,000

Investment in available-for-sale securities (cost)  20,000

Realized gain on sale of available-for-sale securities  10,000

To record the gain on the sale of the securities and report it as a part of current earnings.
Jan. 2  Reclassification adjustment for unrealized holding gain on available-for-sale securities 10,000
     Securities fair value adjustment  10,000

To reclassify the cumulative unrealized gain recorded in other comprehensive income in previous periods to prevent the double counting of the realized gain in the current period. The reclassification adjustment account is a part of other comprehensive income.

Jan. 31  Accumulated other comprehensive income   10,000
     Reclassification adjustment for unrealized holding gain on available-for-sale securities    10,000

To transfer the reclassification adjustment from the comprehensive income to accumulated other comprehensive income.

To summarize the 20X4 journal entries:

a. The realized gain on the sale of securities would appear as a part of current earnings as a credit of $10,000.
b. The reclassification adjustment would be shown on the other comprehensive income statement as a debit of $10,000.
c. The investment in available-for-sale securities account, the securities fair value adjustment account and the accumulated other comprehensive income account would all have zero balances.

DIVIDENDS

Represent income only to the extent paid from earnings subsequent to the date the investment was acquired. Dividends usually are not accrued as the mere passage of time gives no legal right to the receipt of dividends. Dividends may be recorded on the date of (a) declaration, (b) record, or (c) payment (most common—taxed on receipt), and are classified as nonoperating income on the income statement.

Types of Dividends: Assume that an investor owns 100 shares of K Corporation, $100 par value, common stock, which cost $88 per share.

1. Cash Dividends: K Corporation paid a cash dividend of $4 per share.
   Cash (100 shares × $4 ) $400
   Dividend Income $400
   (If recorded before date of payment, debit would be to Dividends Receivable.)

2. Property Dividends: K Corporation distributes a property dividend of one share of N Corporation stock for every 10 shares of K Corporation stock held when N Corporation stock is selling at $40 per share.
   Investments: N Corp. Stock $400
   Dividend Income $400
   \[
   \frac{100 \text{ shares}}{10} = 10 \times 1 \text{ share} \times \frac{40 \text{ FMV}}{} = 400
   \]

   a. Like Kind: K Corp. distributes a stock dividend of one common share for every ten shares held.
      Memorandum entry and recomputation of basic per share
      \[
      \frac{\text{Total Cost}}{\text{Total Shares}} = \frac{\$8,800}{110} = 80 \text{ per share}
      \]
      There are now more shares representing the same ownership interests. Individual shareholders' relative positions of ownership interests are unchanged.
b. **Unlike Kind**: K Corp. then declares a stock dividend of one preferred share for every ten common shares held when the preferred sold at $150 per share and the common sold at $85 per share.

An allocation of cost is necessary based on the relative fair market values of the different classes of stock.

Computation and resulting entry:

\[
\begin{align*}
\text{110 shares} & = \text{11 preferred shares} \\
\text{P/S} & = 11 \text{ shs.} \times \frac{150}{10} = \frac{1,650}{11,000} \times 8,800 = 1,320 \\
\text{C/S} & = 110 \text{ shs.} \times \frac{85}{100} = \frac{9,350}{11,000} \times 8,800 = 7,480 \\
\text{Total Value} & = \frac{11,000}{11,000} = 8,800 \\
\text{Investments: K Corp. P/S} & = 1,320 \\
\text{Investments: K Corp. C/S} & = 1,320
\end{align*}
\]

4. **Liquidating Dividends**: K Corp. paid a cash dividend of $5 per share when retained earnings accumulated subsequent to the investment acquisition would only support a $3 dividend per share.

\[
\begin{align*}
\text{Cash (110 shs.} \times \frac{5}{100}) & = 550 \\
\text{Dividend Income (110 shs.} \times \frac{3}{100}) & = 330 \\
\text{Investment: K Corp. C/S (110 shs.} \times \frac{2}{100}) & = 220 \\
\end{align*}
\]

(The $2 per share is a liquidating dividend representing a return of investment.)

**STOCK RIGHTS**

When an investor purchases stock, he acquires certain legal rights granted by the corporate charter and the laws of the state in which the corporation is organized. A legal right **usually** granted to stockholders is the pre-emptive right which allows the individual stockholders to subscribe to any additional issues of the same class of stock on a pro rata basis. This privilege allows the existing stockholders to maintain their relative interests in the corporation's earnings, assets, and management. One right is offered for each share held; however, usually more than one right is required to subscribe to a new share. A warrant is issued with which the shareholder may:

1. exercise the rights and acquire stock,
2. sell the rights, or
3. do nothing allowing the rights to lapse.

After the announcement of the rights offering but before the rights are issued, the stock will sell **Rights-On**—the "right" is a part of the share. When the rights or warrants are issued (usually three days before), the stock will sell **Ex-Rights**—without the "right" as the right is traded separately.

No matter what a stockholder does with the rights, a cost should be assigned to the rights based on the relative fair market values of the stock and the rights at the date of issue.

**Example**: An investor purchased 100 shares of Co. A common stock for $120 per share, and later received 100 rights to subscribe to 50 additional shares at $100 per share. The market value, after the issuance of the stock rights, of a share of common stock (ex-rights) is $200 and of a right is $40.

\[
\begin{align*}
\text{Investments: Co. A C/S Rights} & = 2,000 \\
\text{Investments: Co. A C/S} & = 2,000 \\
\text{Stock} & = 100 \text{ shs.} \times 200 = 20,000 \\
\text{Rights} & = 100 \text{ shs.} \times 40 = 4,000 \\
\text{Total Value} & = 24,000
\end{align*}
\]
Cost of shares if rights are exercised:
Lot #1: Original Stock

<table>
<thead>
<tr>
<th>Shares</th>
<th>Price per Share</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>$100</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

Lot #2: New Stock

<table>
<thead>
<tr>
<th>Shares</th>
<th>Price per Share</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>$100</td>
<td>$5,000</td>
</tr>
<tr>
<td>200</td>
<td>$20</td>
<td>$2,000</td>
</tr>
<tr>
<td>700</td>
<td>$140</td>
<td>$7,000</td>
</tr>
</tbody>
</table>

Total Cost: $17,000
(Note: $140 per share = $100 paid + 2 rights @ $20 each.)

**STOCK SPLITS**

From the investors' viewpoint, there is little or no difference between a stock split and a stock dividend of the same class of stock (refer above). The investors' relative position of ownership interests is unchanged; there are merely more shares representing the ownership rights. As the investor has received nothing which he did not own before the stock split, no accounting entry is required—memorandum entry may be made. However, the basis of a share of stock must be recomputed.

**Example:** An investor owns 200 shares of Z Corporation, $50 par value, common stock, which cost $60 per share. Z Corporation announces a 2-for-1 stock split, reducing the par value to $25 per share.

Recomputation of cost per share:

\[
\frac{\text{Total Cost}}{\text{Total Shares}} = \frac{60 \times 200 \text{ shs.}}{200 \text{ shs.} \times 2} = \frac{12,000}{400 \text{ shs.}} = $30 \text{ per share}
\]

Later, Z Corporation announces a 3-for-2 stock split. The cost per share would now be $20.

\[
\frac{\text{Total Cost}}{\text{Total Shares}} = \frac{30 \times 400 \text{ shs.}}{400 \text{ shs.} \times 1 1/2} = \frac{12,000}{600} = $20 \text{ per share}
\]

(Note that the total value of the investment, $12,000, does not change.)

**IFRS - STOCKHOLDERS' EQUITY**

There are not any significant theoretical differences between IFRS and US GAAP in accounting for stockholders' equity. There is one minor difference in accounting for convertible debt which is covered in Chapter 9.

The major difference in accounting for stockholders' equity is the difference in terminology: It is similar to visiting London and hearing the term "loo" or "w/c" in Germany. Both terms mean the bathroom in English.
### IFRS - MARKETABLE DEBT AND EQUITY SECURITIES

IFRS refers to marketable debt and equity securities as "Investments when investor lacks significant influence".

IFRS accounting is similar to US GAAP. It classifies investments into three categories. Fair Value through profit and loss (similar to trading securities), Available for Sale and Held to Maturity. Fair Value through profit and loss securities must be traded in an active market and reported at fair value at the end of the period. Unrealized gains and losses are recognized on the income statement.

Available for sale securities are reported at fair value and unrealized gains and losses as part of other comprehensive income.

Held to maturity securities are reported at amortized cost and unrealized gains and losses are not recognized.

Unlike US GAAP, an election can be made to report Available for Sale and Held to Maturity securities at fair value through profit and loss (FVTPL). If this election is made, any unrealized gains and losses from revaluation to fair value must be recognized on the income statement. Once the election to FVTPL is made, the security can not be reclassified.

---

<table>
<thead>
<tr>
<th><strong>IFRS</strong></th>
<th><strong>US GAAP</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital-preference</td>
<td>Preferred stock</td>
</tr>
<tr>
<td>Share capital-ordinary</td>
<td>Common stock</td>
</tr>
<tr>
<td>Share premium-preference</td>
<td>Additional paid in capital-preferred stock</td>
</tr>
<tr>
<td>Share premium-ordinary</td>
<td>Additional paid in capital-common stock</td>
</tr>
<tr>
<td>Retained profits</td>
<td>Retained Earnings</td>
</tr>
<tr>
<td>Accumulated Profit or Loss</td>
<td></td>
</tr>
<tr>
<td>Revenue Reserves</td>
<td></td>
</tr>
<tr>
<td>General reserves or other reserves account*</td>
<td>Accumulated other comprehensive income</td>
</tr>
<tr>
<td>Treasury stock</td>
<td>Treasury Stock</td>
</tr>
<tr>
<td>Minority interest</td>
<td>Non-controlling interest</td>
</tr>
</tbody>
</table>

*General reserves include items reported in other comprehensive income. For example, revaluation surplus which is covered in Chapter 11 is classified as a reserve account.
### FAST TRACK SUMMARY

**MARKETABLE DEBT AND EQUITY SECURITIES**

<table>
<thead>
<tr>
<th></th>
<th>IFRS</th>
<th>US GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classification Categories</strong></td>
<td>Fair Value through profit and loss</td>
<td>Trading Securities</td>
</tr>
<tr>
<td></td>
<td>Available for Sale</td>
<td>Available for Sale</td>
</tr>
<tr>
<td></td>
<td>Hold to Maturity</td>
<td>Hold to Maturity</td>
</tr>
<tr>
<td><strong>Unrealized Gains and Losses</strong></td>
<td>FVTPL on Income Statement</td>
<td>Trading Securities on Income Statement</td>
</tr>
<tr>
<td>Unrealized Gains and Losses on available for sale securities</td>
<td>Other comprehensive income</td>
<td>Other comprehensive income</td>
</tr>
<tr>
<td>Unrealized Gains and Losses held to maturity securities</td>
<td>Not recognized</td>
<td>Not recognized</td>
</tr>
<tr>
<td><strong>Election to report for available for sale and held to maturity securities at FVTPL</strong></td>
<td>Acceptable</td>
<td>Not acceptable</td>
</tr>
<tr>
<td>If election is made, unrealized gains and losses are reported</td>
<td>Income Statement</td>
<td>NA</td>
</tr>
</tbody>
</table>
Chapter Two
Stockholders’ Equity Questions

ISSUE STOCK

1. On April 1, 1999, Hyde Corp., a newly formed company, had the following stock issued and outstanding:

- Common stock, no par, $1 stated value, 20,000 shares originally issued for $30 per share.
- Preferred stock, $10 par value, 6,000 shares originally issued for $50 per share.

Hyde’s April 1, 1999, statement of stockholders’ equity should report

<table>
<thead>
<tr>
<th>Common stock</th>
<th>Preferred stock</th>
<th>Additional paid-in capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $20,000</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>b. $600,000</td>
<td>$600,000</td>
<td>$600,000</td>
</tr>
<tr>
<td>c. $300,000</td>
<td>$300,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>d. $600,000</td>
<td>$600,000</td>
<td>$600,000</td>
</tr>
</tbody>
</table>

LUMP SUM ISSUANCE OF STOCK

3. On March 1, 1999, Rya Corp. issued 1,000 shares of its $20 par value common stock and 2,000 shares of its $20 par value convertible preferred stock for a total of $80,000. At this date, Rya’s common stock was selling for $36 per share, and the convertible preferred stock was selling for $27 per share. What amount of the proceeds should be allocated to Rya’s convertible preferred stock?

a. $60,000
b. $54,000
c. $48,000
d. $44,000

STOCK SUBSCRIPTIONS

4. How should the excess of the subscription price over the par value of common stock subscribed be recorded?

a. As additional paid-in capital when the subscription is received.
b. As additional paid-in capital when the subscription is collected.
c. As retained earnings when the subscription is received.
d. As additional paid-in capital when the capital stock is issued.

DONATED ASSETS

5. Pine City owned a vacant plot of land zoned for industrial use. Pine gave this land to Medi Corp. solely as an incentive for Medi to build a factory on the site. The land had a fair value of $300,000 at the date of the gift. This nonmonetary transaction should be reported by Medi as

a. Extraordinary income.
b. Additional paid-in capital.
c. A credit to retained earnings.
d. A memorandum entry.
RETIRE STOCK

6. In 1999, Fogg, Inc., issued $10 par value common stock for $25 per share. No other common stock transactions occurred until March 31, 2001, when Fogg acquired some of the issued shares for $20 per share and retired them. Which of the following statements correctly states an effect of this acquisition and retirement?
   a. 2001 net income is decreased.
   b. 2001 net income is increased.
   c. Additional paid-in capital is decreased.
   d. Retained earnings is increased.

7. The stockholders' equity section of Peter Corporation's balance sheet at December 31, 19X2, was as follows:

   Common stock ($10 par value, authorized 1,000,000 shares, issued and outstanding 900,000 shares) $ 9,000,000
   Additional paid-in capital 2,700,000
   Retained earnings 1,300,000
   Total stockholders' equity $13,000,000

On January 2, 19X3, Peter purchased and retired 100,000 shares of its stock for $1,800,000. Immediately after retirement of these 100,000 shares, the balances in the additional paid-in capital and retained earnings accounts should be

   Additional  Retained
   paid-in capital earnings

   a. $900,000 $1,300,000
   b. $1,400,000 $800,000
   c. $1,900,000 $1,300,000
   d. $2,400,000 $800,000

TREASURY STOCK – PAR METHOD

8. Ten thousand (10,000) shares of common stock with a par value of $20 per share were initially issued at $25 per share. Subsequently, two thousand (2,000) of these shares were purchased as treasury stock at $30 per share. Assuming that the par value method of accounting for treasury stock transactions is used, what is the effect of the purchase of the treasury stock on each of the following?

   Additional  Retained
   paid-in capital earnings

   a. Decrease  Increase
   b. Decrease  Decrease
   c. Increase  Decrease
   d. Increase  No effect

9. Asp Co. was organized on January 2, 1999, with 30,000 authorized shares of $10 par common stock. During 1999 the corporation had the following capital transactions:

   January 5  - issued 20,000 shares at $15 per share.
   July 14  - purchased 5,000 shares at $17 per share.
   December 27- reissued the 5,000 shares held in treasury at $20 per share.

Asp used the par value method to record the purchase and reissuance of the treasury shares. In its December 31, 1999, balance sheet, what amount should Asp report as additional paid-in capital in excess of par?

   a. $100,000
   b. $125,000
   c. $140,000
   d. $150,000

10. Treasury stock was acquired for cash at a price in excess of its original issue price. The treasury stock was subsequently reissued for cash at a price in excess of its acquisition price. Assuming that the par value method of accounting for treasury stock transactions is used, what is the effect on total stockholders' equity of each of the following events?

   Acquisition of  Reissuance of
   treasury stock  treasury stock

   a. No effect  No effect
   b. Increase  Decrease
   c. Decrease  No effect
   d. Decrease  Increase

TREASURY STOCK – COST METHOD

11. If a corporation sells some of its treasury stock at a price that exceeds its cost, this excess should be

   a. Reported as a gain in the income statement.
   b. Treated as a reduction in the carrying amount of remaining treasury stock.
   c. Credited to additional paid-in capital.
   d. Credited to retained earnings.
12. Ten thousand shares of $20 par value common stock were initially issued at $25 per share. Subsequently, two thousand of these shares were purchased as treasury stock at $30 per share. Assuming that the cost method of accounting for treasury stock transactions is used, what is the effect of the purchase of the treasury stock on the amount reported in the balance sheet for each of the following?

<table>
<thead>
<tr>
<th>Additional paid-in-capital</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No effect</td>
<td>No effect</td>
</tr>
<tr>
<td>b. No effect</td>
<td>Decrease</td>
</tr>
<tr>
<td>c. Decrease</td>
<td>No effect</td>
</tr>
<tr>
<td>d. Decrease</td>
<td>Decrease</td>
</tr>
</tbody>
</table>

13. At its date of incorporation, Glean, Inc., issued 100,000 shares of its $10 par common stock at $11 per share. During the current year, Glean acquired 30,000 shares of its common stock at a price of $16 per share and accounted for them by the cost method. Subsequently, these shares were reissued at a price of $12 per share. There have been no other issuances or acquisitions of its own common stock. What effect does the reissuance of the stock have on the following accounts?

<table>
<thead>
<tr>
<th>Retained earnings</th>
<th>Additional paid-in capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Decrease</td>
<td>Decrease</td>
</tr>
<tr>
<td>b. No effect</td>
<td>Decrease</td>
</tr>
<tr>
<td>c. Decrease</td>
<td>No effect</td>
</tr>
<tr>
<td>d. No effect</td>
<td>No effect</td>
</tr>
</tbody>
</table>

14. In 1999, Newt Corp. acquired 6,000 shares of its own $1 par value common stock at $18 per share. In 2000, Newt issued 3,000 of these shares at $25 per share. Newt uses the cost method to account for its treasury stock transactions. What accounts and amounts should Newt credit in 2000 to record the issuance of the 3,000 shares?

<table>
<thead>
<tr>
<th>Treasury stock paid-in capital</th>
<th>Retained earnings</th>
<th>Common stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $54,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. $54,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. $72,000</td>
<td>$3,000</td>
<td></td>
</tr>
<tr>
<td>d. $51,000</td>
<td>$21,000</td>
<td>$3,000</td>
</tr>
</tbody>
</table>

DONATED TREASURY STOCK

15. On December 1, 1999, Line Corp. received a donation of 2,000 shares of its $5 par value common stock from a stockholder. On that date, the stock’s market value was $35 per share. The stock was originally issued for $25 per share. By what amount would this donation cause total stockholders’ equity to decrease?

a. $70,000
b. $50,000
c. $20,000
d. $0

CASH DIVIDENDS

16. A company declared a cash dividend on its common stock on December 15, 1998, payable on January 12, 1999. How would this dividend affect stockholders' equity on the following dates?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Decrease</td>
<td>No effect</td>
<td>Decrease</td>
<td></td>
</tr>
<tr>
<td>b. Decrease</td>
<td>No effect</td>
<td>No effect</td>
<td>Decrease</td>
</tr>
<tr>
<td>c. No effect</td>
<td>Decrease</td>
<td>No effect</td>
<td>No effect</td>
</tr>
<tr>
<td>d. No effect</td>
<td>No effect</td>
<td>No effect</td>
<td>Decrease</td>
</tr>
</tbody>
</table>

17. When a company declares a cash dividend, retained earnings is decreased by the amount of the dividend on the date of

a. Declaration
b. Record.
c. Payment.
d. Declaration or record, whichever is earlier.

18. At December 31, 1999 and 2000, Carr Corp. had outstanding 4,000 shares of $100 par value 6% cumulative preferred stock and 20,000 shares of $10 par value common stock. At December 31, 1999, dividends in arrears on the preferred stock were $12,000. Cash dividends declared in 2000 totaled $44,000. Of the $44,000, what amounts were payable on each class of stock?

<table>
<thead>
<tr>
<th></th>
<th>Preferred stock</th>
<th>Common stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>$44,000</td>
<td>$0</td>
</tr>
<tr>
<td>b.</td>
<td>$36,000</td>
<td>$8,000</td>
</tr>
<tr>
<td>c.</td>
<td>$32,000</td>
<td>$12,000</td>
</tr>
<tr>
<td>d.</td>
<td>$24,000</td>
<td>$20,000</td>
</tr>
</tbody>
</table>
19. Arp Corp.’s outstanding capital stock at December 15, 1990, consisted of the following:

- 30,000 shares of 5% cumulative preferred stock, par value $10 per share, fully participating as to dividends. No dividends were in arrears.
- 200,000 shares of common stock, par value $1 per share.

On December 15, 1990, Arp declared dividends of $100,000. What was the amount of dividends payable to Arp’s common stockholders?

a. $10,000  
b. $34,000  
c. $40,000  
d. $47,500

STOCK DIVIDENDS

20. How would the declaration of a 15% stock dividend by a corporation affect each of the following?

<table>
<thead>
<tr>
<th>Retained earnings</th>
<th>Total stockholders' equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No effect</td>
<td>No effect</td>
</tr>
<tr>
<td>b. No effect</td>
<td>Decrease</td>
</tr>
<tr>
<td>c. Decrease</td>
<td>No effect</td>
</tr>
<tr>
<td>d. Decrease</td>
<td>Decrease</td>
</tr>
</tbody>
</table>

21. Sprint Company has 1,000,000 shares of common stock authorized with a par value of $3 per share, of which 600,000 shares are outstanding. When the market value was $8 per share, Sprint issued a stock dividend whereby for each six shares held one share was issued as a stock dividend. The par value of the stock was not changed. What entry should Sprint make to record this transaction?

a. Retained earnings $300,000  
   Common stock $300,000  
b. Additional paid-in capital  
   Common stock 300,000  
   300,000  
c. Retained earnings 800,000  
   Common stock 300,000  
   Additional paid-in capital  
   500,000  
d. Additional paid-in capital  
   Common stock 800,000  
   Retained earnings 500,000

22. Smith Company has 1,000,000 shares of common stock authorized with a par value of $3 per share of which 300,000 shares are outstanding. Smith authorized a stock dividend when the market value was $8 per share, entitling its stockholders to one additional share for each share held. The par value of the stock was not changed. What entry, if any, should Smith make to record this transaction?

a. No entry.  
b. Retained earnings $ 900,000  
   Common stock $ 900,000  
c. Retained earnings 2,400,000  
   Common stock 900,000  
   Capital in excess of par  
   1,500,000  
d. Stock dividend payable  
   Retained earnings 900,000  
   Common stock 1,800,000

23. Ray Corp. declared a 5% stock dividend on its 10,000 issued and outstanding shares of $2 par value common stock, which had a fair value of $5 per share before the stock dividend was declared. This stock dividend was distributed 60 days after the declaration date. By what amount did Ray’s current liabilities increase as a result of the stock dividend declaration?

a. $0  
b. $500  
c. $1,000  
d. $2,500

24. The following stock dividends were declared and distributed by Sol Corp.:

<table>
<thead>
<tr>
<th>Percentage of common shares outstanding at declaration date</th>
<th>Fair value</th>
<th>Par value</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>$15,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>28</td>
<td>40,000</td>
<td>30,800</td>
</tr>
</tbody>
</table>

What aggregate amount should be debited to retained earnings for these stock dividends?

a. $40,800  
b. $45,800  
c. $50,000  
d. $55,000
**PROPERTY DIVIDENDS**

25. A property dividend should be recorded in retained earnings at the property’s
   a. Market value at date of declaration.
   b. Market value at date of issuance (payment).
   c. Book value at date of declaration.
   d. Book value at date of issuance (payment).

26. On June 27, 1999, Brite Co. distributed to its common stockholders 100,000 outstanding common shares of its investment in Quik, Inc., an unrelated party. The carrying amount on Brite’s books of Quik’s $1 par common stock was $2 per share. Immediately after the distribution, the market price of Quik’s stock was $2.50 per share. In its income statement for the year ended June 30, 1999, what amount should Brite report as gain before income taxes on disposal of the stock?
   a. $250,000  
   b. $200,000  
   c. $50,000  
   d. $0

27. On December 1, 1999, Nilo Corp. declared a property dividend of marketable securities to be distributed on December 31, 1999, to stockholders of record on December 15, 1999. On December 1, 1999, the marketable securities had a carrying amount of $60,000 and a fair value of $78,000. What is the effect of this property dividend on Nilo’s 1999 retained earnings, after all nominal accounts are closed?
   a. $0.
   b. $18,000 increase.
   c. $60,000 decrease.
   d. $78,000 decrease.

**LIQUIDATING DIVIDEND**

28. On January 2, 1999, the board of directors of Blake Mining Corporation declared a cash dividend of $800,000 to stockholders of record on January 18, 1999, and payable on February 10, 1999. The dividend is permissible under state law in Blake's state of incorporation. Selected data from Blake's December 31, 1999, balance sheet are as follows:
   - Accumulated depletion: $200,000
   - Capital stock: 1,000,000
   - Additional paid-in capital: 300,000
   - Retained earnings: 600,000

   The $800,000 dividend includes a liquidating dividend of
   a. $600,000
   b. $300,000
   c. $200,000
   d. $0

**STOCK SPLIT**

29. What is the most likely effect of a stock split on the par value per share and the number of shares outstanding?

<table>
<thead>
<tr>
<th>Par value per share</th>
<th>Number of shares outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease</td>
<td>Increase</td>
</tr>
<tr>
<td>Decrease</td>
<td>No effect</td>
</tr>
<tr>
<td>Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>No effect</td>
<td>No effect</td>
</tr>
</tbody>
</table>

30. Effective April 27, 1999, the stockholders of Bennett Corporation approved a two-for-one split of the company's common stock, and an increase in authorized common shares from 100,000 shares (par value $20 per share) to 200,000 shares (par value $10 per share). Bennett's stockholders' equity accounts immediately before issuance of the stock split shares were as follows:

   - Common stock, par value $20; 100,000 shares authorized; 50,000 shares outstanding $1,000,000
   - Additional paid-in capital (premium of $3 per share on issuance of common stock) 150,000
   - Retained earnings 1,350,000

   What should be the balances in Bennett's additional paid-in capital and retained earnings accounts immediately after the stock split is effected?

<table>
<thead>
<tr>
<th>Additional paid-in capital</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>$500,000</td>
</tr>
<tr>
<td>$150,000</td>
<td>$350,000</td>
</tr>
<tr>
<td>$150,000</td>
<td>$1,350,000</td>
</tr>
<tr>
<td>$1,150,000</td>
<td>$350,000</td>
</tr>
</tbody>
</table>
31. On July 1, 1999, Bart Corporation has 200,000 shares of $10 par common stock outstanding and the market price of the stock is $12 per share. On the same date, Bart declared a 1-for-2 reverse stock split. The par of the stock was increased from $10 to $20 and one new $20 par share was issued for each two $10 par shares outstanding. Immediately before the 1-for-2 reverse stock split, Bart's additional paid-in capital was $450,000. What should be the balance in Bart's additional paid-in capital account immediately after the reverse stock split is effected?
   a. $0
   b. $450,000
   c. $650,000
   d. $850,000

**SHARES OUTSTANDING**

32. Nest Co. issued 100,000 shares of common stock. Of these, 5,000 were held as treasury stock at December 31, 1999. During 2000, transactions involving Nest's common stock were as follows:

   May 3 - 1,000 shares of treasury stock were sold.
   August 6 - 10,000 shares of previously unissued stock were sold.
   November 18 - A 2-for-1 stock split took effect.

Laws in Nest's state of incorporation protect treasury stock from dilution. At December 31, 2000, how many shares of Nest's common stock were issued and outstanding?

<table>
<thead>
<tr>
<th>Shares</th>
<th>Issued</th>
<th>Outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>220,000</td>
<td>212,000</td>
</tr>
<tr>
<td>b.</td>
<td>220,000</td>
<td>216,000</td>
</tr>
<tr>
<td>c.</td>
<td>222,000</td>
<td>214,000</td>
</tr>
<tr>
<td>d.</td>
<td>222,000</td>
<td>218,000</td>
</tr>
</tbody>
</table>

33. Rudd Corp. had 700,000 shares of common stock authorized and 300,000 shares outstanding at December 31, 1999. The following events occurred during 2000:

   January 31 - Declared 10% stock dividend
   June 30 - Purchased 100,000 shares
   August 1 - Reissued 50,000 shares
   November 30 - Declared 2-for-1 stock split

At December 31, 2000, how many shares of common stock did Rudd have outstanding?

   a. 560,000
   b. 600,000
   c. 630,000
   d. 660,000

**RETAINED EARNINGS**

34. A retained earnings appropriation can be used to
   a. Absorb a fire loss when a company is self-insured.
   b. Provide for a contingent loss that is probable and reasonable.
   c. Smooth periodic income.
   d. Restrict earnings available for dividends.

35. Selected information from the accounts of Row Co. at December 31, 1999, follows:

   Total income since incorporation $420,000
   Total cash dividends paid 130,000
   Total value of property dividends distributed 30,000
   Excess of proceeds over cost of treasury stock sold, accounted for using the cost method 110,000

   In its December 31, 1999, financial statements, what amount should Row report as retained earnings?

   a. $260,000
   b. $290,000
   c. $370,000
   d. $400,000

**STOCK RIGHTS**

36. A company issued rights to its existing shareholders without consideration. The rights allowed the recipients to purchase unissued common stock for an amount in excess of par value. When the rights are issued, which of the following will be increased?

   Additional Common stock paid-in capital
   a. Yes Yes
   b. Yes No
   c. No No
   d. No Yes

37. On July 1, 1999, Vail Corp. issued rights to stockholders to subscribe to additional share of its common stock. One right was issued for each share owned. A stockholder could purchase one additional share for 10 rights plus $15 cash. The rights expired on September 30, 1999. On July 1, 1999, the market price of a share with the right attached was $40, while the market price of one right alone was $2. Vail’s stockholders’ equity on June 30, 1999, comprised the following:
Common stock, $25 par value, 4,000 shares issued and outstanding $100,000
Additional paid-in capital 60,000
Retained earnings 80,000

By what amount should Vail’s retained earnings decrease as a result of issuance of the stock rights on July 1, 1999?

a. $0
b. $5,000
c. $8,000
d. $10,000

BOOK VALUE PER SHARE

38. Hoyt Corp.’s current balance sheet reports the following stockholders’ equity:

5% cumulative preferred stock, par value $100 per share; 2,500 shares issued and outstanding $250,000
Common stock, par value $3.50 per share; 100,000 shares issued and outstanding 350,000
Additional paid-in capital in excess of par value of common stock 125,000
Retained earnings 300,000

Dividends in arrears on the preferred stock amount to $25,000. If Hoyt were to be liquidated, the preferred stockholders would receive par value plus a premium of $50,000. The book value per share of common stock is

a. $7.75
b. $7.50
c. $7.25
d. $7.00

39. Maga Corp.’s stockholders’ equity at December 31, 1999, comprised the following:

6% cumulative preferred stock, $100 par; liquidating value $110 per share; authorized, issued, and outstanding 50,000 shares $5,000,000
Common stock, $5 par; 1,000,000 shares authorized; issued and outstanding 400,000 shares 2,000,000
Retained earnings 1,000,000

Dividends on preferred stock have been paid through 1998 but have not been declared for 1999. At December 31, 1999, Maga's book value per common share was

a. $5.50
b. $6.25
c. $6.75
d. $7.50

QUASI-REORGANIZATION

40. The stockholders' equity section of Brown Co.’s December 31, 1999, balance sheet consisted of the following:

Common stock, $30 par, 10,000 shares authorized and outstanding $300,000
Additional paid-in capital 150,000
Retained earnings (deficit) (210,000)

On January 2, 2000, Brown put into effect a stockholder-approved quasi-reorganization by reducing the par value of the stock to $5 and eliminating the deficit against additional paid-in capital. Immediately after the quasi-reorganization, what amount should Brown report as additional paid-in capital?

a. $(60,000)
b. $150,000
c. $190,000
d. $400,000

41. The primary purpose of a quasi-reorganization is to give a corporation the opportunity to

a. Obtain relief from its creditors.
b. Revalue understated assets to their fair values.
c. Eliminate a deficit in retained earnings.
d. Distribute the stock of a newly created subsidiary to its stockholders in exchange for part of their stock in the corporation.
REVIEW QUESTIONS

STOCKHOLDERS’ EQUITY

42. Posy Corp. acquired treasury shares at an amount greater than their par value, but less than their original issue price. Compared to the cost method of accounting for treasury stock, does the par value method report a greater amount for additional paid-in capital and a greater amount for retained earnings?

<table>
<thead>
<tr>
<th>Additional paid-in capital</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
</tr>
<tr>
<td>d. No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

43. In 1999, Elm Corp. bought 10,000 shares of Oil Corp. at a cost of $20,000. On January 15, 2000, Elm declared a property dividend of the Oil stock to shareholders of record on February 1, 2000, payable on February 15, 2000. During 2000, the Oil stock had the following market values:

- January 15: $25,000
- February 1: $26,000
- February 15: $24,000

The net effect of the foregoing transactions on retained earnings during 2000 should be a reduction of

a. $20,000
b. $24,000
c. $25,000
d. $26,000

44. The condensed balance sheet of Adams & Gray, a partnership, at December 31, 1999, follows:

<table>
<thead>
<tr>
<th>Current assets</th>
<th>$250,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment (net)</td>
<td>30,000</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$280,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>$20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams, capital</td>
<td>160,000</td>
</tr>
<tr>
<td>Gray, capital</td>
<td>100,000</td>
</tr>
<tr>
<td><strong>Total liabilities and capital</strong></td>
<td><strong>$280,000</strong></td>
</tr>
</tbody>
</table>

On December 31, 1999, the fair values of the assets and liabilities were appraised at $240,000 and $20,000, respectively, by an independent appraiser. On January 2, 2000, the partnership was incorporated and 1,000 shares of $5 par value common stock were issued. Immediately after the incorporation, what amount should the new corporation report as additional paid-in capital?

a. $275,000
b. $260,000
c. $215,000
d. $0.

45. Which of the following best describes a possible result of treasury stock transactions by a corporation?

a. May directly decrease but not increase retained earnings.
b. May affect total stockholders’ equity if the cost method is used instead of the par value method.
c. May increase but not decrease reported net earnings.
d. May decrease but not increase reported net earnings.

46. Gilbert Corporation issued a 40% stock splitup of its common stock which had a par value of $10 before and after the split-up. At what amount should retained earnings be capitalized for the additional shares issued?

a. There should be no capitalization of retained earnings.
b. Par value.
c. Market value on the declaration date.
d. Market value on the payment date.

47. On incorporation, Dee Inc., issued common stock at a price in excess of its par value. No other stock transactions occurred except treasury stock was acquired for an amount exceeding this issue price. If Dee uses the par value method of accounting for treasury stock appropriate for retired stock, what is the effect of the acquisition on the following?

<table>
<thead>
<tr>
<th>Net common stock</th>
<th>Additional paid-in capital</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No effect</td>
<td>Decrease</td>
<td>No effect</td>
</tr>
<tr>
<td>b. Decrease</td>
<td>Decrease</td>
<td>Decrease</td>
</tr>
<tr>
<td>c. Decrease</td>
<td>No effect</td>
<td>Decrease</td>
</tr>
<tr>
<td>d. No effect</td>
<td>Decrease</td>
<td>Decrease</td>
</tr>
</tbody>
</table>

2Q-8
48. The acquisition of treasury stock will cause the number of shares outstanding to decrease if the treasury stock is accounted for by the

<table>
<thead>
<tr>
<th></th>
<th>Cost method</th>
<th>Par value method</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>b.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>c.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d.</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

49. Cricket Corp. issued, without consideration, rights allowing stockholders to subscribe for additional shares at an amount greater than par value but less than both market and book values. When the rights are exercised, how are the following accounts affected?

<table>
<thead>
<tr>
<th>Retained earnings</th>
<th>Additional paid-in capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Decreased</td>
<td>Not affected</td>
</tr>
<tr>
<td>b. Not affected</td>
<td>Not affected</td>
</tr>
<tr>
<td>c. Decreased</td>
<td>Increased</td>
</tr>
<tr>
<td>d. Not affected</td>
<td>Increased</td>
</tr>
</tbody>
</table>

50. East Co. issued 1,000 shares of its $5 par common stock to Howe as compensation for 1,000 hours of legal services performed. Howe usually bills $160 per hour for legal services. On the date of issuance, the stock was trading on a public exchange at $140 per share. By what amount should the additional paid-in capital account increase as a result of this transaction?

a. $135,000  
b. $140,000  
c. $155,000  
d. $160,000

51. On September 1999, West Corp. made a dividend distribution of one right for each of its 120,000 shares of outstanding common stock. Each right was exercisable for the purchase of 1/100 of a share of West's $50 variable rate preferred stock at an exercise price of $80 per share. On March 20, 2003, none of the rights had been exercised, and West redeemed them by paying each stockholder $0.10 per right. As a result of this redemption, West's stockholders' equity was reduced by

a. $120  
b. $2,400  
c. $12,000  
d. $36,000

52. A clearly identified appropriation of retained earnings for reasonably possible loss contingencies should be

a. Charged with all losses related to that contingency.  
b. Transferred to income as losses are realized.  
c. Classified in the liability section of the balance sheet.  
d. Shown within the stockholders' equity section of the balance sheet.

53. Grid Corp. acquired some of its own common shares at a price greater than both their par value and original issue price but less than their book value. Grid uses the cost method of accounting for treasury stock. What is the impact of this acquisition on total stockholders’ equity and the book value per common share?

<table>
<thead>
<tr>
<th>Total stockholders' equity per share</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Increase</td>
</tr>
<tr>
<td>b. Increase</td>
</tr>
<tr>
<td>c. Increase</td>
</tr>
<tr>
<td>d. Decrease</td>
</tr>
</tbody>
</table>

54. Long Co. had 100,000 shares of common stock issued and outstanding at January 1, 1999. During 1999, Long took the following actions:

- March 15 Declared a 2-for-1 stock split, when the fair value of the stock was $80 per share.  
- December 15 Declared a $.50 per share cash dividend.

In Long's statement of stockholders' equity for 1999, what amount should Long report as dividends?

a. $50,000  
b. $100,000  
c. $850,000  
d. $950,000

55. Cyan Corp. issued 20,000 shares of $5 par common stock at $10 per share. On December 31, 1999, Cyan's retained earnings were $300,000. In March 2000, Cyan reacquired 5,000 shares of its common stock at $20 per share. In June 2000, Cyan sold 1,000 of these shares to its corporate officers for $25 per share. Cyan uses the cost method to record treasury stock. Net income for the year ended December 31, 2000, was $60,000. At December 31, 2000, what amount should Cyan report as retained earnings?
a. $360,000  

b. $365,000  

c. $375,000  

d. $380,000

56 and 57 are based on the following:

The following format was used by Gee, Inc., for its 1999 statement of owners’ equity:

<table>
<thead>
<tr>
<th>Common stock, $1 par</th>
<th>Additional paid-in capital</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at 1/1/99</td>
<td>$90,000</td>
<td>$800,000</td>
</tr>
<tr>
<td>Additions and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>deductions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% stock dividend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5% stock dividend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at 12/31/99</td>
<td>________________________</td>
<td>____________________</td>
</tr>
</tbody>
</table>

When both the 100% and the 5% stock dividends were declared, Gee’s common stock was selling for more than its $1 par value.

56. How would the 100% stock dividend affect the additional paid-in capital and retained earnings amounts reported in Gee’s 1999 statement of owners’ equity?

<table>
<thead>
<tr>
<th>Additional paid-in capital</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>b. Increase</td>
<td>Decrease</td>
</tr>
<tr>
<td>c. No change</td>
<td>Increase</td>
</tr>
<tr>
<td>d. No change</td>
<td>Decrease</td>
</tr>
</tbody>
</table>

57. How would the 5% stock dividend affect the additional paid-in capital and retained earnings amounts reported in Gee’s 1999 statement of owners’ equity?

<table>
<thead>
<tr>
<th>Additional paid-in capital</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Increase</td>
<td>Decrease</td>
</tr>
<tr>
<td>b. Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>c. No change</td>
<td>Decrease</td>
</tr>
<tr>
<td>d. No change</td>
<td>Increase</td>
</tr>
</tbody>
</table>

58. Georgia, Inc. has an authorized capital of 1,000 shares of $100 par, 8% cumulative preferred stock and 100,000 shares of $10 par common stock. The equity account balances at December 31, 1981, are as follows:

<table>
<thead>
<tr>
<th>Equity Account</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative preferred stock</td>
<td>$50,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>90,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>9,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>13,000</td>
</tr>
<tr>
<td>Treasury stock, common – 100 shares at cost</td>
<td>(2,000)</td>
</tr>
<tr>
<td></td>
<td>$160,000</td>
</tr>
</tbody>
</table>

Dividends on preferred stock are in arrears for the year 1981. The book value of a share of common stock, at December 31, 1981, should be

a. $11.78  

b. $11.91  

c. $12.22  

d. $12.36

INVESTMENT IN STOCK

GENERAL

59. An investor uses the cost method to account for an investment in common stock. Dividends received this year exceeded the investor’s share of investee’s undistributed earnings since the date of investment. The amount of dividend revenue that should be reported in the investor’s income statement for this year would be

a. The portion of the dividends received this year that were in excess of the investor’s share of investee’s undistributed earnings since the date of investment.

b. The portion of the dividends received this year that were not in excess of the investor’s share of investee’s undistributed earnings since the date of investment.

c. The total amount of dividends received this year.

d. Zero.
DIVIDENDS

60. Bort Co. purchased 2,000 shares of Crel Co. common stock on March 5, 1999, for $72,000. Bort received a $1,000 cash dividend on the Crel stock on July 15, 1999. Crel declared a 10% stock dividend on December 15, 1999, to stockholders of record as of December 31, 1999. The dividend was distributed on January 15, 2000. The market price of the stock was $38 on December 15, 1999, $40 on December 31, 1999, and $42 on January 15, 2000. What amount should Bort record as dividend revenue for the year ended December 31, 1999?
   a. $1,000
   b. $8,600
   c. $9,000
   d. $9,400

61. Wood Co. owns 2,000 shares of Arlo, Inc.'s 20,000 shares of $100 par, 6% cumulative, nonparticipating preferred stock and 1,000 shares (2%) of Arlo's common stock. During 1999, Arlo declared and paid dividends of $240,000 on preferred stock. No dividends had been declared or paid during 1998. In addition, Wood received a 5% common stock dividend from Arlo when the quoted market price of Arlo's common stock was $10 per share. What amount should Wood report as dividend income in its 1999 income statement?
   a. $12,000
   b. $12,500
   c. $24,000
   d. $24,500

62. Simpson Co. received dividends from its common stock investments during the year ended December 31, 1999, as follows:
   • A cash dividend of $8,000 from Wren Corp., in which Simpson owns a 2% interest.
   • A cash dividend of $45,000 from Brill Corp., in which Simpson owns a 30% interest. This investment is appropriately accounted for using the equity method.
   • A stock dividend of 500 shares from Paul Corp. was received on December 15, 1999, when the quoted market value of Paul's shares was $10 per share. Simpson owns less than 1% of Paul's common stock.

In Simpson's 1999 income statement, dividend revenue should be
   a. $58,000
   b. $53,000
   c. $13,000
   d. $8,000

ASC 320 - ACCOUNTING FOR CERTAIN INVESTMENTS IN DEBT AND EQUITY SECURITIES

63. Kale Co. has adopted Statement of Financial Accounting Standards ASC 320, Accounting for Certain Investments in Debt and Equity Securities. Kale purchased bonds at a discount on the open market as an investment and intends to hold these bonds to maturity. Kale should account for these bonds at
   a. Cost.
   b. Amortized cost.
   c. Fair value.
   d. Lower of cost or market.

64. A company has adopted Statement of Financial Accounting Standards ASC 320, Accounting for Certain Investments in Debt and Equity Securities. It should report the marketable equity securities that it has classified as trading at
   a. Lower of cost or market, with holding gains and losses included in earnings.
   b. Lower of cost or market, with holding gains included in earnings only to the extent of previously recognized holding losses.
   c. Fair value, with holding gains included in earnings only to the extent of previously recognized holding losses.
   d. Fair value, with holding gains and losses included in earnings.

65. Data regarding Ball Corp.'s long-term marketable equity securities follow:

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Fair value</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 31, 1999</td>
<td>$150,000</td>
<td>$130,000</td>
</tr>
<tr>
<td>December 31, 2000</td>
<td>150,000</td>
<td>160,000</td>
</tr>
</tbody>
</table>

Differences between cost and market values are considered temporary. The decline in market value was considered temporary and was properly accounted for at December 31, 2000. Ball's 2000 statement of changes in stockholders' equity would report an increase of
   a. $30,000
   b. $20,000
   c. $10,000
   d. $0
66. At December 31, 1999, Hull Corp. had the following marketable equity securities that were purchased during 1999, its first year of operations:

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Fair Value</th>
<th>Unrealized gain (loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trading Securities:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security A</td>
<td>$90,000</td>
<td>$60,000</td>
<td>$(30,000)</td>
</tr>
<tr>
<td>B</td>
<td>$15,000</td>
<td>$20,000</td>
<td>$5,000</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$105,000</td>
<td>$80,000</td>
<td>$(25,000)</td>
</tr>
<tr>
<td><strong>Available-for-Sale Securities:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Y</td>
<td>$70,000</td>
<td>$80,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Z</td>
<td>$90,000</td>
<td>$45,000</td>
<td>$(45,000)</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$160,000</td>
<td>$125,000</td>
<td>$(35,000)</td>
</tr>
</tbody>
</table>

All market declines are considered temporary.

Valuation allowances at December 31, 1999, should be established with a corresponding net charge against Stockholders' equity

<table>
<thead>
<tr>
<th>Income</th>
<th>Stockholders' equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $60,000</td>
<td>$0</td>
</tr>
<tr>
<td>b. $30,000</td>
<td>$35,000</td>
</tr>
<tr>
<td>c. $25,000</td>
<td>$0</td>
</tr>
<tr>
<td>d. $25,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

67. For a marketable equity securities portfolio included in noncurrent assets, which of the following amounts should be included in the period's net income?

I. Unrealized temporary losses during the period.
II. Realized gains during the period.
III. Changes in the valuation allowance during the period.

a. III only.
b. II only.
c. I and II.
d. I, II, and III.

68. When the fair value of an investment in debt securities exceeds its amortized cost, how should each of the following debt securities be reported at the end of the year?

<table>
<thead>
<tr>
<th>Debt securities classified as</th>
<th>Held-to-maturity</th>
<th>Available-for-sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Amortized cost</td>
<td>Amortized cost</td>
<td></td>
</tr>
<tr>
<td>b. Amortized cost</td>
<td>Fair value</td>
<td></td>
</tr>
<tr>
<td>c. Fair value</td>
<td>Fair value</td>
<td></td>
</tr>
<tr>
<td>d. Fair value</td>
<td>Amortized cost</td>
<td></td>
</tr>
</tbody>
</table>

69. The following information was extracted from Gil Co.'s December 31, 1994, balance sheet:

Noncurrent assets:
- Long-term investments in marketable equity securities (at fair value) $96,450
- Accumulated other comprehensive income** (25,000)

(** Includes a net unrealized holding loss on long-term investments in marketable equity securities of $19,800.)

Historical cost of the long-term investments in marketable equity securities was

- a. $63,595
- b. $76,650
- c. $96,450
- d. $116,250

70. During 1999, Wall Co. purchased 2,000 shares of Hemp Corp. common stock for $31,500 as a short-term investment. The investment was appropriately classified as a Trading Security. The market value of this investment was $29,500 at December 31, 1999. Wall sold all of the Hemp common stock for $14 per share on January 15, 2000, incurring $1,400 in brokerage commissions and taxes. On the sale, Wall should report a realized loss of

a. $4,900
b. $3,500
c. $2,900
d. $1,500
REVIEW QUESTIONS

INVESTMENT IN STOCK

71. The following information pertains to Lark Corp.'s long-term marketable equity securities portfolio:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2000</th>
<th>December 31, 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$200,000</td>
<td>$200,000</td>
</tr>
<tr>
<td>Fair value</td>
<td>$240,000</td>
<td>$180,000</td>
</tr>
</tbody>
</table>

Differences between cost and market values are considered to be temporary. The decline in market value was properly accounted for at December 31, 1999. At December 31, 2000, what is the net unrealized holding gain or loss to be reported as

- $40,000 Gain
- $60,000 Gain
- $20,000 Loss
- $0

72. Reed, Inc., began operations on January 1, 1999. The following information pertains to Reed's December 31, 1999, portfolio of marketable equity securities:

<table>
<thead>
<tr>
<th>Current</th>
<th>Noncurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate cost</td>
<td>$360,000</td>
</tr>
<tr>
<td>Aggregate fair value</td>
<td>320,000</td>
</tr>
</tbody>
</table>

Aggregate lower of cost or market value applied to each security in the portfolio: 304,000 420,000

If the market declines are judged to be temporary, what amounts should Reed report as valuation allowances for its current and noncurrent marketable equity securities at December 31, 1999?

- $40,000 Current, $0 Noncurrent
- $0 Current, $100,000 Noncurrent
- $40,000 Current, $100,000 Noncurrent
- $56,000 Current, $130,000 Noncurrent

73. In 1997, Cromwell Corporation bought and categorized as available-for-sale 30,000 shares of Fleming Corporation's listed stock for $300,000. This stock was not accounted for by the equity method. In 1999, when the market value had declined to $200,000, Cromwell changed its classification of this investment from current to noncurrent. In January 2000, before Cromwell's 1999 year-end statements were issued, the market value of the Fleming stock had risen to $230,000. How much should Cromwell record as a realized loss in its determination of net income for 1999?

- $0
- $30,000
- $70,000
- $100,000

74. On January 2, 1999, Adam Co. purchased as a long-term investment 10,000 shares of Mill Corp.'s common stock for $40 a share. The investment was appropriately classified as an available-for-sale security. On December 31, 1999, the market price of Mill's stock was $35 a share, reflecting a temporary decline in market price. On December 28, 2000, Adam sold 8,000 shares of Mill stock for $30 a share. For the year ended December 31, 2000, Adam should report a loss on disposal of long-term investment of

- $100,000
- $90,000
- $80,000
- $40,000

75. Stock dividends on common stock should be recorded at their fair market value by the investor when the related investment is accounted for under which of the following methods?

<table>
<thead>
<tr>
<th>Cost</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
76. On both December 31, 1999, and December 31, 2000, Kopp Co.'s only marketable equity security had the same market value, which was below cost. Kopp considered the decline in value to be temporary in 1999 but other than temporary in 2000. At the end of both years the security was classified as a noncurrent asset. Kopp could not exercise significant influence over the investee. What should be the effects of the determination that the decline was other than temporary on Kopp's 2000 net noncurrent assets and net income?

a. No effect on both net noncurrent assets and net income.
b. No effect on net noncurrent assets and decrease in net income.
c. Decrease in net noncurrent assets and no effect on net income.
d. Decrease in both net noncurrent assets and net income.

77. Dey Corp. began operations in 1999. An analysis of Dey's marketable equity securities portfolio acquired in 1999, shows the following totals at December 31, 1999, for securities categorized as trading and available-for-sale:

<table>
<thead>
<tr>
<th>Security</th>
<th>Trading assets</th>
<th>Available-for-sale assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate cost</td>
<td>$45,000</td>
<td>$65,000</td>
</tr>
<tr>
<td>Aggregate fair value</td>
<td>39,000</td>
<td>57,000</td>
</tr>
<tr>
<td>Aggregate lower of cost or market value applied to each security in the portfolio</td>
<td>38,000</td>
<td>56,000</td>
</tr>
</tbody>
</table>

What valuation allowance should Dey report at December 31, 1999, for the unrealized holding loss included in its 1999 income statement?

a. $14,000
b. $9,000
c. $7,000
d. $6,000

78. During 1999, Scott Corp. purchased marketable equity securities as long-term investments. Pertinent data follow:

<table>
<thead>
<tr>
<th>Security</th>
<th>Cost</th>
<th>Fair value at 12/31/99</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>$36,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>E</td>
<td>80,000</td>
<td>60,000</td>
</tr>
<tr>
<td>F</td>
<td>180,000</td>
<td>186,000</td>
</tr>
<tr>
<td></td>
<td>$296,000</td>
<td>$286,000</td>
</tr>
</tbody>
</table>

Scott appropriately carries these securities at fair value. The amount of unrealized holding loss on these securities in Scott's 1999 income statement should be

a. $20,000
b. $14,000
c. $10,000
d. $0

79. Zinc Co.'s adjusted trial balance at December 31, 1999, includes the following account balances:

- Common stock, $3 par $600,000
- Additional paid-in capital 800,000
- Treasury stock, at cost 50,000
- Accumulated other comprehensive income (Debit) 20,000
- Retained earnings appropriated for uninsured earthquake losses 150,000
- Retained earnings unappropriated 200,000

What amount should Zinc report as total stockholders' equity in its December 31, 1999, balance sheet?

a. $1,680,000
b. $1,720,000
c. $1,780,000
d. $1,820,000

**Recently Released Questions**

80. On January 15, 2000 Rice Co. declared its annual cash dividend on common stock for the year ended January 31, 2000. The dividend was paid on February 9, 2000, to stockholders of record as of January 28, 2000. On what date should Rice decrease retained earnings by the amount of the dividend?

a. January 15, 2000
b. January 31, 2000
c. January 28, 2000
d. February 9, 2000

81. Godart Co. issued $4,500,000 notes payable as a scrip dividend that matured in five years. At maturity, each shareholder of Godart's three million shares will receive payment of the note principal plus interest. The annual interest rate was 10%. What amount should be paid to the stockholders at the end of the fifth year?

a. $450,000
b. $2,250,000
c. $4,500,000
d. $6,750,000
82. Porter Co. began its business last year and issued 10,000 shares of common stock at $3 per share. The par value of the stock is $1 per share. During January of the current year, Porter bought back 500 shares at $6 per share, which were reported by Porter as treasury stock. The treasury stock shares were reissued later in the current year at $10 per share. Porter used the cost method to account for its equity transactions. What amount should Porter report as paid-in capital related to its treasury stock transactions on its balance sheet for the current year?

a. $1,500  
b. $2,000  
c. $4,500  
d. $20,000

83. The following is the stockholders’ equity section of Harbor Co.’s balance sheet at December 31:

Common stock $10 par, 100,000 shares authorized, 50,000 shares issued of which 5,000 have been reacquired, and are held in treasury $450,000
Additional paid-in capital common stock 1,100,000
Retained earnings 800,000
Subtotal $2,350,000
Less treasury stock (150,000)
Total stockholders’ equity $2,200,000

Harbor has insignificant amounts of convertible securities, stock warrants, and stock options. What is the book value per share of Harbor’s common stock?

a. $31  
b. $44  
c. $46  
d. $49

84. During the current year, Onal Co. purchased 10,000 shares of its own stock at $7 per share. The stock was originally issued at $6. The firm sold 5,000 of the treasury shares for $10 per share. The firm uses the cost method to account for treasury stock. What amount should Onal report in its income statement for these transactions?

a. $0  
b. $5,000 gain  
c. $10,000 loss  
d. $15,000 gain

85. IFRS uses the term share capital preference. What is the equivalent term in US GAAP?

a. Preferred assets  
b. Capitalized preferred assets  
c. Preferred stock  
d. Additional paid in capital

86. What would the equivalent US term for the IFRS term "accumulated profit or loss"?

a. Retained earnings  
b. Net income  
c. Reserve  
d. Operating income

87. General reserves or other reserves would include which of the following items in US GAAP?

a. Reserve for bad debts  
b. Reserve for accumulated depreciation  
c. Reserve for inventory valuation  
d. Accounts included in accumulated other comprehensive income

88. Under IFRS, investments can be classified in any of the following categories except for

a. Tradable  
b. Held to Maturity  
c. Available for Sale  
d. Fair Value through Profit and Loss

89. Under IFRS, in order to be accounted for under the Fair Value through profit and loss approach, a security must be

a. A treasury bill  
b. Common stock  
c. A convertible bond  
d. Traded in an active market

90. Under IFRS, if an investment that is classified as Fair Value through profit and loss increases in value, this unrealized gain is reported as a part of

a. Other comprehensive income  
b. The calculation of net income  
c. Retained earnings  
d. Accumulated other comprehensive income
91. On April 15, Year 5, ABC purchased in the open market a 5% interest in the common stock of XYZ Corp for $100,000. ABC classifies the investment as available for sale. At December 31, Year 5, the investment had increased in value by $10,000. Under IFRS how should this unrealized gain be reported?
   a. Profit and Loss
   b. Other comprehensive income
   c. Retained earnings
   d. Revaluation surplus

92. Using the same facts as in m/c question #91, assume that ABC elects to classify the available for sale security as fair value through profit and loss, how should the unrealized gain be reported?
   a. Profit and Loss
   b. Other comprehensive income
   c. Retained earnings
   d. Revaluation surplus
Chapter Two
Stockholders' Equity and Investment in Stock
Problems

NUMBER 1

Part a. Capital stock is an important area of a corporation's equity section. Generally the term "capital stock" embraces common and preferred stock issued by a corporation.

Required:
1. What are the basic rights inherent in ownership of common stock, and how are they exercised?
2. What is preferred stock? Discuss the various preferences afforded preferred stock.

Part b. In dealing with the various equity securities of a corporate entity it is important to understand certain terminology related thereto.

Required: Define the following terms.
1. Treasury stock.
2. Legal capital.
3. Stock right.
4. Stock warrant.

NUMBER 2

For numerous reasons a corporation may reacquire shares of its own capital stock. When a company purchases treasury stock, it has two options as to how to account for the shares: (1) cost method, and (2) par value method.

Required:
Compare and contrast the cost method with the par value method for each of the following:
1. Purchase of shares at a price less than par value.
2. Purchase of shares at a price greater than par value.
3. Subsequent resale of treasury shares at a price less than purchase price, but more than par value.
4. Subsequent resale of treasury shares at a price greater than both purchase price and par value.
5. Effect on net income.
**NUMBER 3**

Fay, Inc. finances its capital needs approximately one-third from long-term debt and two-thirds from equity. At December 31, 1996, Fay had the following liability and equity account balances:

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>11% Debenture bonds payable, face amount</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>Premium on bonds payable</td>
<td>352,400</td>
</tr>
<tr>
<td>Common stock</td>
<td>8,000,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>2,295,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>2,465,000</td>
</tr>
<tr>
<td>Treasury stock, at cost</td>
<td>325,000</td>
</tr>
</tbody>
</table>

Transactions during 1997 and other information relating to Fay's liabilities and equity accounts were as follows:

- The debenture bonds were issued on December 31, 1994, for $5,378,000 to yield 10%. The bonds mature on December 31, 2009. Interest is payable annually on December 31. Fay uses the interest method to amortize bond premium.
- Fay's common stock shares are traded on the over-the-counter market. At December 31, 1996, Fay had 2,000,000 authorized shares of $10 par common stock.
- On January 15, 1997, Fay reissued 15,000 of its 25,000 shares of treasury stock for $225,000. The treasury stock had been acquired on February 28, 1996.
- On March 2, 1997, Fay issued a 5% stock dividend on all issued shares. The market price of Fay's common stock at time of issuance was $14 per share.
- On November 1, 1997, Fay borrowed $4,000,000 at 9%, evidenced by an unsecured note payable to United Bank. The note is payable in five equal annual principal installments of $800,000. The first principal and interest payment is due on November 1, 1998.
- On December 31, 1997, Fay owned 10,000 shares of Ryan Corp.'s common stock, which represented a 1% ownership interest. Fay accounts for this marketable equity investment as a long-term investment. The stock was purchased on May 1, 1996, at $20 per share. The market price was $21 per share on December 31, 1996, and $18 per share on December 31, 1997.
- Fay's net income for 1997 was $2,860,000.

**Required (Include formal schedules of supporting computations with each item referenced to correspond with the items in the solution):**

Prepare the stockholders' equity section of Fay's December 31, 1997, balance sheet.

**NUMBER 4**

Problems may be encountered in accounting for transactions involving the stockholders' equity section of the balance sheet.

**Required:**

a. Describe the accounting for the subscription of common stock at a price in excess of the par value of the common stock.

b. Describe the accounting for the issuance for cash of no par value common stock at a price in excess of the stated value of the common stock.

c. Explain the significance of the three dates that are important in accounting for cash dividends to stockholders. State the journal entry, if any, needed at each date.

d. Assume retained earnings can be used for stock dividends distributable in shares. What is the effect of an ordinary 10 percent common stock dividend on retained earnings and total stockholders' equity?
Mart, Inc., is a public company whose shares are traded in the over-the-counter market. At December 31, 1998, Mart had 6,000,000 authorized shares of $5 par value common stock, of which 2,000,000 shares were issued and outstanding. The stockholders' equity accounts at December 31, 1998, had the following balances:

<table>
<thead>
<tr>
<th>Account</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common stock</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>7,500,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>3,250,000</td>
</tr>
</tbody>
</table>

Transactions during 1999 and other information relating to the stockholders' equity accounts were as follows:

- On January 5, 1999, Mart issued at $54 per share, 100,000 shares of $50 par value, 9% cumulative, convertible preferred stock. Each share of preferred stock is convertible, at the option of the holder, into two shares of common stock. Mart had 250,000 authorized shares of preferred stock. The preferred stock has a liquidation value of $55 per share.
- On February 1, 1999, Mart reacquired 20,000 shares of its common stock for $16 per share. Mart uses the cost method to account for treasury stock.
- On March 15, 1999, Mart paid $200,000 for 10,000 shares of common stock of Lew, Inc., a public company whose stock is traded on a national stock exchange. This stock was acquired for long-term investment purposes and had a fair market value of $15 per share on December 31, 1999. This decline in market value was not considered permanent.
- On April 30, 1999, Mart had completed an additional public offering of 500,000 shares of its $5 par value common stock. The stock was sold to the public at $12 per share, net of offering costs.
- On June 17, 1999, Mart declared a cash dividend of $1 per share of common stock, payable on July 10, 1999, to stockholders of record on July 1, 1999.
- On November 6, 1999, Mart sold 10,000 shares of treasury stock for $21 per share.
- On January 17, 2000, before the books were closed for 1999, Mart became aware that the ending inventories at December 31, 1998, were overstated by $200,000. The after-tax effect on 1998 net income was $140,000. The appropriate correction entry was recorded the same day.
- After correction of the beginning inventories, net income for 1999 was $2,250,000.

**Required:**

a. Prepare a statement of retained earnings for the year ended December 31, 1999. Assume that only single period financial statements for 1999 are presented.
b. Prepare the stockholders' equity section of Mart's balance sheet at December 31, 1999.
Number 6 consists of 8 items. Select the best answer for each item. Answer all items.

Min Co. is a publicly-held company whose share are traded in the over-the-counter market. The stockholders' equity accounts at December 31, 1999, had the following balances:

- Preferred stock, $100 par value, 6% cumulative; 5,000 shares authorized; 2,000 issued and outstanding: $200,000
- Common stock, $1 par value, 150,000 shares authorized; 100,000 issued and outstanding: 100,000
- Additional paid-in capital: 800,000
- Retained earnings: 1,586,000
- Total stockholders' equity: $2,686,000

Transactions during 2000 and other information relating to the stockholders' equity accounts were as follows:

- February 1, 2000-Issued 13,000 shares common stock to Ram Co. in exchange for land. On the date issued, the stock had a market price of $11 per share. The land had a carrying value on Ram's books of $135,000, and an assessed value for property taxes of $90,000.
- March 1, 2000-Purchased 5,000 shares of its own common stock to be held as treasury stock for $14 per share. Min uses the cost method to account for treasury stock. Transactions in treasury stock are legal in Min's state of incorporation.
- May 10, 2000-Declared a property dividend of marketable securities held by Min to common shareholders. The securities had a carrying value of $600,000; fair value on relevant dates were:
  - Date of declaration: (May 10, 2000) $720,000
  - Date of record: (May 25, 2000) 758,000
  - Date of distribution: (June 1, 2000) 736,000
- October 1, 2000-Reissued 2,000 shares of treasury stock for $16 per share.
- November 4, 2000-Declared a cash dividend of $1.50 per share to all common shareholders of record November 15, 2000. The dividend was paid on November 25, 2000.
- December 20, 2000-Declared the required annual cash dividend on preferred stock for 2000. The dividend was paid on January 5, 2001.
- January 16, 2001-Before closing the accounting records for 2000, Min became aware that no amortization had been recorded for 1999 for a patent purchased on July 1, 1999. The patent was properly capitalized at $320,000 and had an estimated useful life of eight years when purchased. Min's income tax rate is 30%. The appropriate correcting entry was recorded on the same day.
- Adjusted net income for 2000 was $838,000.
Required:

Items 1 through 7 represent amounts to be reported in Min's financial statements. Item 8 represents other financial information. For all items, calculate the amounts requested.

Items 1 through 3 represent amounts to be reported on Min's 2000 statement of retained earnings.

1. Preferred dividends.
2. Common dividends-cash.

Items 4 through 7 represent amounts to be reported on Min's statement of stockholders' equity at December 31, 2000.

5. Amount of common stock issued.
6. Additional paid-in capital, including treasury stock transactions.
7. Treasury stock.

Item 8 represents other financial information for 1998.

8. Book value per share at December 31, 1999, before prior period adjustment.

**NUMBER 7**

Brady Company has 30,000 shares of $10 par value common stock authorized and 20,000 shares issued and outstanding. On August 15, 2000, Brady purchased 1,000 shares of treasury stock for $12 per share. Brady uses the cost method to account for treasury stock. On September 14, 2000, Brady sold 500 shares of the treasury stock for $14 per share.

In October 2000, Brady declared and distributed 2,000 shares as a stock dividend from unissued shares when the market value of the common stock was $16 per share.

On December 20, 2000, Brady declared a $1 per share cash dividend, payable on January 10, 2001, to shareholders of record on December 31, 2000.

Required:

a. How should Brady account for the purchase and sale of the treasury stock, and how should the treasury stock be presented in Brady's balance sheet at December 31, 2000?

b. How should Brady account for the stock dividend, and how would it affect Brady's stockholders' equity at December 31, 2000? Why?

c. How should Brady account for the cash dividend, and how would it affect Brady's balance sheet at December 31, 2000? Why?
NUMBER 8

Presented below is information pertaining to Cox Stationery Supply, a calendar-year sole proprietorship owned by John Cox. The business maintains its books on the cash basis except that, at year end, the closing inventory and depreciation are recorded. On December 31, 1999, after recording inventory and depreciation, and closing the nominal accounts, Cox had the following general ledger trial balance:

Cox Stationery Supply
TRIAL BALANCE
December 31, 1999

<table>
<thead>
<tr>
<th></th>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$16,500</td>
<td></td>
</tr>
<tr>
<td>Merchandise inventory</td>
<td>39,000</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>52,500</td>
<td></td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>$20,500</td>
<td></td>
</tr>
<tr>
<td>Note payable, bank</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Payroll taxes withheld</td>
<td>1,300</td>
<td></td>
</tr>
<tr>
<td>Cox, capital</td>
<td>______</td>
<td>76,200</td>
</tr>
</tbody>
</table>

$108,000  $108,000

During the last quarter of 1999, John Cox and Mary Rice, an outside investor, agreed to incorporate the business under the name of Cox Stationers, Inc. Cox will receive 1,000 shares for his business, and Rice will pay $86,000 cash for her 1,000 shares. On January 1, 2000, they received the certificate of incorporation for Cox Stationers, Inc., and the corporation issued 1,000 shares of common stock each to Cox and Rice for the above consideration. The agreement between Cox and Rice requires that the December 31, 1999, balance sheet of the proprietorship should be converted to the accrual basis, with all assets and liabilities stated at current fair values, including Cox's goodwill implicit in the terms of the common stock issuance.

Additional information:
1. Amounts due from customers totaled $23,500 at December 31, 1999. A review of collectibility disclosed that an allowance for doubtful accounts of $3,300 is required.
2. The $39,000 merchandise inventory is based on a physical count of goods priced at cost. Unsalable damaged goods costing $2,500 are included in the count. The current fair value of the total merchandise inventory is $45,000.
3. On July 1, 1999, Cox paid $3,800 to renew the comprehensive insurance coverage for one year.
4. The $10,000 note payable is dated July 1, 1999, bears interest at 12%, and is due July 1, 2000.
6. During January 2000, final payroll tax returns filed for Cox Stationery Supply required remittances totaling $2,100.
7. Not included in the trial balance is the $3,500 principal balance at December 31, 1999, of the three-year loan to purchase a delivery van on December 31, 1997. The debt was assumed by the corporation on January 1, 2000. The current fair value of the used equipment is $40,000, including the delivery van.
8. Cox Stationers, Inc., has 7,500 authorized shares of $50 par common stock.

Required:
a. Prepare a schedule to compute Cox's goodwill implicit in the issuance to him of 1,000 shares of common stock for his business.
b. Prepare a formal balance sheet of Cox Stationers, Inc., at January 1, 2000, immediately after the issuance of common stock to Cox and Rice. Journal entries and trial balance worksheet are not required.
NUMBER 9

Number 9 consists of 10 items. Select the best answer for each item. Answer all items. Your grade will be based on the total number of correct answers.

Items 1 through 4 are based on the following:

Camp Co. purchased various securities during 1999 to be classified as held-to-maturity securities, trading securities, or available-for-sale securities.

Required:
Items 1 through 4 describe various securities purchased by Camp. For each item, select from the following list the appropriate category for each security. A category may be used once, more than once, or not at all.

Categories:

(H) Held-to-maturity.
(T) Trading.
(A) Available-for-sale.

1. Debt securities bought and held for the purpose of selling in the near term.
2. U.S. Treasury bonds that Camp has both the positive intent and the ability to hold to maturity.
3. $3 million debt security bought and held for the purpose of selling in three years to finance payment of Camp's $2 million long-term note payable when it matures.
4. Convertible preferred stock that Camp does not intend to sell in the near term.

Items 5 through 10 are based on the following:

The following information pertains to Dayle, Inc.'s portfolio of marketable investments for the year ended December 31, 1999:

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Fair value 12/31/98</th>
<th>Purchases</th>
<th>Sales</th>
<th>Fair value 12/31/99</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Held-to-maturity securities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security ABC</td>
<td>$100,000</td>
<td>$95,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trading securities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security DEF</td>
<td>$150,000</td>
<td>$160,000</td>
<td></td>
<td></td>
<td>155,000</td>
</tr>
<tr>
<td><strong>Available-for-sale securities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security GHI</td>
<td>190,000</td>
<td>165,000</td>
<td>$175,000</td>
<td></td>
<td>$175,000</td>
</tr>
<tr>
<td>Security JKL</td>
<td>170,000</td>
<td>175,000</td>
<td></td>
<td></td>
<td>160,000</td>
</tr>
</tbody>
</table>

Security ABC was purchased at par. All declines in fair value are considered to be temporary.
**Required:**

**Items 5 through 10** describe amounts to be reported in Dayle's 1999 financial statements. For each item, select from the following list the correct numerical response. An amount may be selected once, more than once, or not at all.


**Items 8 through 10** require a second response. For each item, indicate whether a gain (G) or a loss (L) is to be reported.

8. Recognized gain or loss on sale of security GHI.

9. Unrealized gain or loss to be reported in 1999 income statement.

10. Unrealized gain or loss to be included in Accumulated other comprehensive income, reported in equity at December 31, 1999.

**Answer List:**

(A) $0  
(B) $5,000  
(C) $10,000  
(D) $15,000  
(E) $25,000  
(F) $95,000  
(G) $100,000  
(H) $150,000  
(I) $155,000  
(J) $160,000  
(K) $170,000
Chapter Two
Solutions to Stockholders' Equity Questions

1. (a) Capital stock (common or preferred) is recorded at the:
   a) par value established at incorporation; or
   b) stated value established by the board of directors when no par value is established at incorporation; or
   c) issue price when no par value or stated value has been established.

   Amounts in excess of par or stated value constitute APIC.

   Common stock: $1 stated value × 20,000 shares = $20,000
   Preferred stock: $10 par value × 6,000 shares = $60,000

   APIC
   Common 20,000 shares × ($30 – $1) = $580,000
   Preferred 6,000 shares × ($50 – $10) = 240,000
   $820,000

2. (d) $82,000.

   Book value of net assets
   (Jay capital + Kay capital) = $80,000

   Increase in fair value
   Tangible assets $7,000
   Goodwill 5,000 12,000

   Fair value of net assets (equity) = 92,000
   Less: Par value of stock issued
   10,000 shares × $1 par = (10,000)
   Additional paid-in capital = $82,000

3. (c) $48,000.

<table>
<thead>
<tr>
<th># shares</th>
<th>Ratio</th>
<th>Value</th>
<th>Wt.Value</th>
<th>% Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common stock 1000 1</td>
<td>$36</td>
<td>$36.00</td>
<td>36/90 = 40%</td>
<td></td>
</tr>
<tr>
<td>Preferred stock 2000 2</td>
<td>27</td>
<td>54.00</td>
<td>54/90 = 60%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$90.00</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

   Proceeds allocated to preferred stock = 60% × $80,000 = $48,000

4. (a) Additional paid-in capital resulting from stock subscriptions is recorded when the stock is subscribed. Only the stock is identified or segregated as subscribed in the capital accounts until the subscription is paid and the stock issued.

5. (b) Donated assets are recorded at fair market value as a credit to Additional paid-in capital—Donated assets.

6. (c) The entries to record the stock issuance and subsequent acquisition and retirement (per share) are as follows:

   Issuance: Cash 25
   Common stock 10
   APIC in excess of par common 15

   Retirement: Common stock 10
   APIC in excess of par common 15
   Cash 20
   APIC: Stock Retirement 5
The net result is a decrease in APIC of $10 per share retired.

Answers (a) and (b) are incorrect as capital stock transactions do not affect net income. Answer (d) is incorrect as capital stock (treasury stock) transactions never increase retained earnings.

7. (d) Entry to record retirement:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock (100,000 at $10 Par)</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>APIC (100,000 at $3 prorata portion)</td>
<td>300,000</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>500,000</td>
</tr>
<tr>
<td>Cash</td>
<td>$1,800,000</td>
</tr>
</tbody>
</table>

Prorata portion of APIC = $2,700,000  APIC = $3 per share
900,000 shares

8. (b) Under the Par Method the excess of cost of treasury stock over par or stated value:

1. **May be** allocated between A.P.I.C. and retained earnings. The portion allocated to A.P.I.C. is limited to the sum of:
   a) the pro rata portion of A.P.I.C. on the same issue;
   b) all A.P.I.C. from retirements and net "gains" on the sale of treasury stock of the same issue.

2. **May be** charged entirely to retained earnings.

Only Answer (b) satisfies the above alternatives—application of alternative #1.

9. (b) $125,000.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Shares</th>
<th>Price</th>
<th>APIC in excess of par</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/5</td>
<td>Issue of stock: 20,000 shares @ $5</td>
<td>20,000</td>
<td>$5</td>
<td></td>
<td>100,000</td>
</tr>
<tr>
<td></td>
<td>($15 price – $10 par)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/14</td>
<td>Acquisition of Treasury stock: 5,000 shares @ $5</td>
<td>5,000</td>
<td>$5</td>
<td>($25,000)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(excess over original issue price is charged to Retained earnings)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/27</td>
<td>Reissue of Treasury shares: 5,000 shares @ $10</td>
<td>5,000</td>
<td>$10</td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>($20 price – $10 par)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$125,000</td>
</tr>
</tbody>
</table>

The Par Value method accounts for Treasury stock as a quasi-retirement:
1) T/S is charged for the par of the shares;
2) APIC is charged for the pro-rata portion of APIC attributable to the shares acquired;
3) Retained earnings is charged for the excess of cost over #1 and #2 above or APIC Treasury stock is credited for the excess of #1 and #2 above over cost of the shares acquired.

10. (d) Acquisition of treasury stock (a contra stockholders equity element) will result in a decrease in stockholders' equity whether recorded at cost or par. The subsequent reissuance will increase stockholders' equity as the contra equity is removed. If it is sold at a price in excess of its cost, stockholders' equity will be greater than it was prior to its purchase and sale.

11. (c) Under the cost method, when treasury stock is sold at a price in excess of its cost, the "gain" is credited to APIC – treasury stock transactions.

12. (a) Under the Cost Method of accounting for treasury stock, the purchase of stock is recorded by debiting treasury stock for the full cost. There is no effect on the balance of APIC or Retained Earnings; however, the retained earnings are restricted for dividend purposes in an amount equal to the cost of the stock. When sold, any "gain" (selling price in excess of cost) is credited to APIC (from treasury stock transactions) and any loss (cost in excess of selling price) is charged to APIC and/or retained earnings.
13. (c) The sale of the treasury stock resulted in a "loss" of $4 per share ($12 selling price – $16 cost) or $120,000 (30,000 shares × $4 per share). Under the cost method of accounting for treasury stock transactions, a "loss" on the sale of treasury stock is charged (debited) to APIC from treasury stock transactions to the extent of prior "gains" from the sale of treasury stock, any excess "loss" is charged to retained earnings. As there were no prior treasury stock transactions, the entire "loss" on the sale of the treasury stock ($120,000) would be charged to retained earnings.

14. (b) Entry to record sale of treasury stock:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash (3,000 shares × $25)</td>
<td>$75,000</td>
</tr>
<tr>
<td>Treasury stock (3,000 shares × $18 cost)</td>
<td>$54,000</td>
</tr>
<tr>
<td>APIC—Treasury stock transactions</td>
<td>21,000</td>
</tr>
</tbody>
</table>

Under the cost method, when treasury stock is sold at a price in excess of its cost, the "gain" is credited to APIC—treasury stock transactions.

Answers (a) and (d) are incorrect, as retained earnings may not be increased by treasury stock transactions. Answers (c) and (d) are incorrect, as treasury stock transactions do not affect the capital stock (common or preferred) accounts.

15. (d) A donation of stock to the corporation causes no reduction of assets and therefore does not affect total stockholders’ equity. Under the cost method, there would be only a memorandum entry in the treasury stock account. When reissued, the proceeds would be credited to APIC: Donated Capital. Under the par value method, Treasury Stock would be debited and APIC: Donated Capital would be credited for the par value. When reissued, proceeds in excess of par would be credited to APIC: Donated Capital.

16. (b) Dividends are recorded and reduce stockholders' equity (retained earnings) at the date of declaration.

17. (a) Dividends are recorded as a liability and reduction of retained earnings at the date of declaration.

18. (b) Total dividend declared $44,000

Less: Dividend to preferred stock:

- 1999 dividends in arrears $12,000
- 2000 dividend $24,000

Dividend to common stock $8,000

19. (c) $40,000—Dividends payable to common shareholders.

<table>
<thead>
<tr>
<th></th>
<th>Preferred</th>
<th>Common</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred</td>
<td>15,000</td>
<td>15,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Common at preferred rate</td>
<td>10,000</td>
<td>10,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Participating dividend based on total par values*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred</td>
<td>45,000</td>
<td></td>
<td>45,000</td>
</tr>
<tr>
<td>Common</td>
<td></td>
<td>75,000</td>
<td>75,000</td>
</tr>
<tr>
<td>Total dividends</td>
<td>$60,000</td>
<td>$30,000</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

*When common stock has a par or stated value, participation is allocated on the aggregate dollar amount of common and preferred stock outstanding. If common stock does not have a par or stated value, participation is based on the number of shares of each class outstanding.

NOTE: If the total dividend is sufficient to provide for a common stock dividend based upon the preferred dividend rate, current dividends will be the same percentage of total par value for each class of stock.
20. (c) Stock dividends do not affect total stockholders' equity as the reduction in retained earnings is offset by an equal increase in the paid-in capital accounts. This is a small stock dividend, less than 20-25 percent of the total outstanding shares, and would be recorded by charging retained earnings for the fair market value of the stock on the date of declaration, and crediting common stock for the par value of the shares issued and APIC for the excess of market value over par value.

21. (c) The number of shares issued is less than the 20-25% guideline established in ARB 43 to determine the treatment of a stock dividend. Therefore, the transaction is considered a dividend and retained earnings should be charged for the FMV at date of declaration.

22. (b) This type of transaction (where the additional shares issued are greater than 20-25% of the total outstanding shares) is a split-up effected in the form of a dividend. Retained earnings should be capitalized in an amount equal to the par value of the shares in the distribution.

   $300,000 \times 3 = $900,000

23. (a) $0 current liability.
Declaraton of a stock dividend does not affect current liabilities as the dividend will not be satisfied with the current assets of the corporation. Rather, shares of stock will be issued to satisfy the dividend. A stock dividend results in a transfer between equity accounts only, the decrease in retained earnings being offset by an equal increase in the paid-in capital accounts.

24. (b) $45,800.

   10% stock dividend: Small stock dividends, less than 20-25% of the outstanding shares, are recorded at the fair market value of the shares issued as of the date of declaration $15,000

   28% stock dividend: Large stock dividends, greater than 20-25% of the outstanding shares, are recorded at the par value of the shares issued as of the date of declaration 30,800

Total charge to retained earnings for stock dividends declared $45,800

25. (a) A property dividend is a non-monetary transaction and, as such, is appropriately recorded at the fair market value of the asset to be distributed, as of the date of declaration. Any difference between the property’s fair market value and its carrying value would be recognized as a gain or loss in the current period.

26. (c) Fair market value of property dividend

   $2.50 \times 100,000 \text{ shares} = $250,000

   Carrying value

   $2.00 \times 100,000 \text{ shares} = 200,000

   Gain on disposal of investment $50,000

Property dividends are recorded at the fair market value of the property distributed as of the date of declaration, with any gain or loss being recognized in the current period.

27. (c) $60,000 decrease in retained earnings.

   Deduction for property dividend

   Fair market value, date of declaration $78,000

   Increase for gain on disposal of investment

   Fair market value, date of declaration $78,000

   Less: Cost of investment 60,000

   Gain on disposal of investment 18,000

Net decrease in retained earnings $60,000

Property dividends are nonmonetary transactions and are appropriately recorded at the fair market value of the asset to be distributed, as of the date of declaration, with any gain or loss in disposal of the property recognized in the current period.
28. (c) Dividend declared $800,000
Retained earnings at declaration 600,000
Liquidating dividend $200,000

A liquidating dividend is a "return of capital", a distribution of paid-in capital, as opposed to a "return on capital", a distribution of retained earnings.

29. (a) A stock split increases the number of shares outstanding. Because a stock split most likely does not increase total par value, the par value per share will decrease.

30. (c) As the par value was reduced and the number of shares increased proportionately, there is no effect from the stock split on legal capital (total par value of issued stock), A.P.I.C., or retained earnings.

31. (b) As the par value was increased ($10 to $20) and the number of shares decreased proportionately (200,000 to 100,000), there is no effect from the reverse stock split on legal capital (total par value of issued shares), A.P.I.C., or retained earnings.

32. (a) 220,000 shares issued; 212,000 shares outstanding.
Treasury stock is stock which has been issued by a corporation and subsequently reacquired by that corporation, but not formally retired. As the issuing corporation holds the stock it is not outstanding stock; however, as the stock has not been formally retired, it is issued stock. Treasury stock participates in stock splits and stock dividends.

<table>
<thead>
<tr>
<th>Shares</th>
<th>Issued</th>
<th>Treasury</th>
<th>= Outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/3 Sale of Treasury stock</td>
<td>100,000</td>
<td>5,000</td>
<td>95,000</td>
</tr>
<tr>
<td>8/6 Issuance of stock</td>
<td>10,000</td>
<td>(1,000)</td>
<td>1,000</td>
</tr>
<tr>
<td>11/18 2-for-1 stock split</td>
<td>110,000</td>
<td>4,000</td>
<td>106,000</td>
</tr>
<tr>
<td>Shares 12/31/00</td>
<td>220,000</td>
<td>8,000</td>
<td>212,000</td>
</tr>
</tbody>
</table>

33. (a) 1/1 shares outstanding 300,000
1/31 10% stock dividend issued 30,000
6/30 treasury stock purchased (100,000)
8/1 treasury stock reissued 50,000
Shares outstanding 280,000
11/30 2-for-1 stock split 280,000
12/31 shares outstanding 560,000

34. (d) An appropriation of retained earnings (a reserve) is used to inform financial statement users of a restriction on the availability of retained earnings for dividends. The entry to record an appropriation charges Retained Earnings and credits Appropriated Retained Earnings. When the appropriation is no longer needed, the only proper entry is to reverse the entry that established the appropriation.

35. (a) $260,000

| Total income since incorporation | $420,000 |
| Less: | |
| Cash dividends | (130,000) |
| Property dividends (at F.M.V.) | (30,000) |
| Retained earnings | $260,000 |

The excess proceeds over the cost of treasury stock sold ("Gain on sale of treasury stock") is accounted for as Additional Paid in Capital.
36. (c) The issuance of stock rights to existing stockholders does not result in a formal journal entry on the books of the issuing corporation. Only a memorandum journal entry is made. These rights merely evidence the stockholders' preemptive right. Furthermore, no formal journal entry is required to record the lapse of stock rights issued to existing stockholders as no formal journal entry was made to record their issuance.

Common stock and additional paid-in capital would be recorded (increase) when the stock rights were exercised and the stock issued.

37. (a) $0 decrease in retained earnings.

The issuance of stock rights to existing stockholders does not result in a formal journal entry on the books of the issuing corporation. Only a memorandum journal entry is made. These rights merely evidence the stockholders' preemptive right. Furthermore, no formal journal entry is required to record the lapse of stock rights issued to existing stockholders as no formal journal entry was made to record their issuance.

38. (d) $7.00 book value per share of common stock.

<table>
<thead>
<tr>
<th>Total stockholders' equity</th>
<th>$1,025,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less: Preferred stock liquidating value</td>
<td>(300,000)</td>
</tr>
<tr>
<td>($250,000 par + $50,000 premium)</td>
<td>(300,000)</td>
</tr>
<tr>
<td>Preferred dividends in arrears</td>
<td>(25,000)</td>
</tr>
<tr>
<td>Book value of common stock</td>
<td>$ 700,000</td>
</tr>
<tr>
<td>Common shares outstanding</td>
<td>$ 100,000</td>
</tr>
<tr>
<td>Book value per common share</td>
<td>$ 7.00</td>
</tr>
</tbody>
</table>

39. (a) Total stockholders' equity  

<table>
<thead>
<tr>
<th>Total stockholders' equity</th>
<th>$8,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less: Preferred stock liquidating value</td>
<td>(5,500,000)</td>
</tr>
<tr>
<td>(50,000 shares × $110)</td>
<td>(5,500,000)</td>
</tr>
<tr>
<td>Preferred stock dividends in arrears</td>
<td>(300,000)</td>
</tr>
<tr>
<td>($5,000,000 par × 6% × 1 year)</td>
<td>(300,000)</td>
</tr>
<tr>
<td>Book value of common stock</td>
<td>$2,200,000</td>
</tr>
<tr>
<td>Common shares outstanding</td>
<td>$ 400,000</td>
</tr>
<tr>
<td>Book value per common share</td>
<td>$ 5.00</td>
</tr>
</tbody>
</table>

40. (c) $190,000 APIC

<table>
<thead>
<tr>
<th>Common Stock</th>
<th>APIC</th>
<th>Retained Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning balances</td>
<td>$300,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>Reduce Par to $5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$30 - $5 = $25 to APIC</td>
<td>(250,000)</td>
<td>250,000</td>
</tr>
<tr>
<td>$25 x 10,000 sh.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eliminate deficit</td>
<td>(210,000)</td>
<td>210,000</td>
</tr>
<tr>
<td>Ending balances</td>
<td>$ 50,000</td>
<td>$190,000</td>
</tr>
</tbody>
</table>

41. (c) A quasi-reorganization is undertaken to reduce a deficit in retained earnings to zero.

Answer (a) is incorrect because a quasi-reorganization is an accounting adjustment. It offers no relief from creditors. Answer (b) is incorrect because assets are usually written down to fair value. Answer (d) is incorrect because a quasi-reorganization does not entail an exchange of stock.

42. (c) Under the par value method, acquisition of treasury stock at an amount greater than par value, but less than original issue price would result in a net decrease in additional paid-in capital equal to the excess of cost over the par value. Retained earnings would not be affected as the cost was not greater than the original issue price.

Under the cost method, treasury stock is recorded at cost and neither additional paid-in capital nor retained earnings are affected.
43. (a) $20,000. Net reduction in retained earnings:
   Deduction for property dividend
     Fair market value, date of declaration $25,000
   Increase for gain on disposal of investment
     Fair market value, date of declaration $25,000
     Less cost of investment 20,000
     Gain on disposal of investment 5,000
     Net reduction in retained earnings $20,000

   Property dividends are nonmonetary transactions and are appropriately recorded at the fair market value of the asset to be distributed, as of the date of declaration, with any gain or loss on disposal of the property recognized in the current period.

   The net effect of a property dividend is a decrease in retained earnings (and assets) equal to the cost of the asset distributed as a property dividend.

44. (c) Fair value of equity:
   Fair value of assets $240,000
     –  Fair value of liabilities (20,000)
   220,000
   Less par value of shares issued (1000 × $5) (5,000)
   Additional paid-in capital $215,000

   For financial accounting purposes, non-cash contributions are recorded at the fair market value as of the date of contribution.

45. (a) Per ASC 505, when a corporation retires its stock the excess paid over par should be allocated between APIC and retained earnings or alternatively charged to retained earnings.

46. (b) The general rule per ASC 505 is if the shares issued are less than 20-25% of the total outstanding shares, retained earnings should be capitalized based on the fair value of the additional shares issued (stock dividend). If the shares issued are 25% or more, the transaction is considered a "split-up effected in the form of a dividend" and requires the capitalization of retained earnings at par value. The distinction is drawn because large distributions have the effect of materially reducing per share market value.

47. (b) Under the par value method, the preferable entry is to charge:
   • Treasury stock for the par value of the shares acquired
   • APIC for the pro rata portion of APIC attributable to the stock acquired
   • Retained earnings for any excess paid over the above amounts.

   The treasury stock is reported in the balance sheet as a reduction of the outstanding stock of the same class.

48. (c) Treasury stock is stock which has been issued by a corporation and subsequently reacquired by that corporation, but not formally retired. As the issuing corporation holds the stock it is not outstanding stock (stock held by an investor); however, because the stock has not been formally retired it is issued stock. The cost and par value methods are different techniques of recording treasury stock transactions, but have no effect on the characteristics of the stock.

49. (d) The issuance of stock rights to existing stockholders does not result in a formal journal entry on the books of the issuing corporation. Only a memorandum journal entry is made. These rights merely evidence the stockholders' preemptive right. When the rights are exercised, the issuance of stock is recorded like any other stock issuance, the stock is credited for its par value and additional paid-in capital (in excess of par) is credited for proceeds greater than par value. Retained earnings are not affected by the sale of stock.
50. (a) $135,000. Nonmonetary transactions should be recorded at the fair market value of the assets given or received (whichever is more clearly evident). As the stock is publicly traded, its value at issuance, should be used as the fair value of the transaction.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of stock (1000 shares @ $140 per share)</td>
<td>$140,000</td>
</tr>
<tr>
<td>– Par value of stock (1000 shares @ $5 per share)</td>
<td>5,000</td>
</tr>
<tr>
<td>Credit to Additional Paid-in Capital</td>
<td>$135,000</td>
</tr>
</tbody>
</table>

51. (c) $12,000.

When stock rights are issued to shareholders without consideration, only a memo entry is made. Stockholders' equity would be effected when the rights are exercised (increase equity accounts) or redeemed (reduce stockholders' equity). The redemption reduces stockholders' equity $12,000 (120,000 rights @ $.10).

52. (d) An appropriation of R.E. cannot be charged with losses, transferred to income or classified as a liability.

53. (c) Treasury stock results in a decrease in total stockholders’ equity equal to the cost of the treasury stock under both the cost method and par value method of recording treasury stock. Under the cost method, treasury stock is recorded at cost, and reported as a contra-account in stockholders’ equity.

Treasury stock is issued stock; however, it is not outstanding stock. Book value per common share is based upon the number of shares outstanding (treasury stock is excluded). Therefore, the acquisition of treasury stock at a price (cost) less than its book value would result in an increase in the book value per common share, as the book value of the treasury stock in excess of cost would be attributed to the remaining outstanding shares.

54. (b) $100,000.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1</td>
<td>Shares issued and outstanding</td>
<td>100,000</td>
</tr>
<tr>
<td>Mar. 15</td>
<td>2 for 1 stock split</td>
<td>x 2</td>
</tr>
<tr>
<td>Mar. 15</td>
<td>Shares issued and outstanding</td>
<td>200,000</td>
</tr>
<tr>
<td>Dec. 15</td>
<td>Cash Dividend declared (per share)</td>
<td>x $.50</td>
</tr>
<tr>
<td></td>
<td>Dividends for year</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

55. (a) $360,000. Retained earnings at 12/31/00.

Under the cost method of recording Treasury stock transactions:

- The acquisition of T/S does not effect retained earnings.
- T/S is recorded at cost.
- The sale of T/S above cost (at a "gain") does not effect retained earnings.
- "Gain" is credited to APIC Treasury stock.
- The sale of T/S below cost (at a "loss") would reduce retained earnings for the "loss" in excess of APIC from prior Treasury stock transactions.
- Retained earnings is never increased by treasury stock transactions.

Therefore, the retained earnings would equal to beginning balance, $300,000 plus net income for the period, $60,000.

56. (d) Additional paid-in capital, no change; Retained earnings, decrease.

Large stock dividends, greater than 20-25% of the total outstanding shares, are considered a split-up effected in the form of a dividend and are recorded at the par value of the shares issued. The entry to record the dividend would charge retained earnings and credit common stock for the total par value of the shares issued. Additional paid-in capital would not be affected.

57. (a) Additional paid-in capital, increase; Retained earnings, decrease.

Small stock dividends, less than 20-25% of the total outstanding shares, are recorded at the fair market value of the shares issued as of the date of declaration. The entry to record the dividend would charge retained earnings for the fair market value of the shares issued, and credit common stock for the par value of the shares issued and APIC for the excess of market value over par value.
58. (b)

Total stockholders' equity $160,000
Less: Preferred stock par (50,000)
Preferred dividends in arrears
  (50,000 x 8% x 1) (4,000)
Book value common stock 106,000
Common shares outstanding $11,91
Book value per share $ 11.91

Common shares outstanding:
  Total issued (90,000 ÷ $10 par) 9,000
  Less: Treasury stock (100) (100)
  Shares outstanding $8,900

59. (b) Dividends received in excess of an investor's share of the investee's earnings subsequent to the date of the investment are liquidating dividends and represent a return of investment. A liquidating dividend is recorded as a reduction of the investment.

60. (a) $1,000 dividend revenue (cash dividends received.)

Stock dividends usually do not constitute income to the recipient. Stock dividends reduce the investor’s cost per share, as the investment cost ($72,000) is allocated to more shares (2,200 = 2,000 original plus 10% of 2,000).

61. (c) $24,000.

<table>
<thead>
<tr>
<th></th>
<th>1998 Division in arrears ($6 per share x 2000 shares)</th>
<th>$12,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1999 Current dividend</td>
<td>12,000</td>
</tr>
<tr>
<td></td>
<td>Total dividend income</td>
<td>$24,000</td>
</tr>
</tbody>
</table>

The 5% common stock dividend does not constitute income. Stock dividends merely reduce the cost per share (basis) of the investment in common stock.

62. (d) Dividend revenue would consist of the $8,000 dividend from Wren Corporation. This investment would be accounted for using the cost method as Simpson's percentage of ownership is less than 20% (assumption of no significant influence). Under the cost method dividends received are recorded as income.

Under the equity method of accounting for investments, dividends received are treated as a reduction of the investment carrying value (basis). Therefore, the $45,000 dividend from Brill Corp. would not be included in dividend revenue.

Stock dividends do not usually constitute income under either the cost or equity method of accounting for investments. Therefore, the 500 shares received as a stock dividend from Paul Corp. would not be included in dividend revenue.

63. (b) Debt securities that the entity has the positive intent and ability to hold to maturity are classified as "held-to-maturity" and are reported at amortized cost.

64. (d) Debt and equity securities that are bought and held principally for the purpose of selling them in the near term are classified as trading securities and are reported at fair value with unrealized holding gains and losses included in earnings.

65. (a) $30,000. Marketable equity securities (equity securities with readily determinable fair values) are categorized as either trading securities (which are classified as current assets) or available-for-sale securities (which are classified as current or noncurrent assets), as appropriate. Because Ball’s investments are long-term they are categorized as available-for-sale securities.

Available for sale securities are reported at fair value with unrealized holding gains and losses reported as a component of other comprehensive income. The $30,000 unrealized holding gain for 2000 would be included in
the other comprehensive income which would be reported as a change in the balance of Accumulated Other Comprehensive Income, a separate element of equity and, therefore, included in a statement of changes in stockholders’ equity.

Net unrealized holding gain at 12/31/00
(Cost $150,000 vs. F.V. $160,000) $10,000
Net unrealized holding loss @ 12/31/99
(Cost $150,000 vs. F.V. $130,000) 20,000
Unrealized holding gain for 2000 $30,000

Alternative calculation:
F.V. @ 12/31/00 $160,000
F.V. @ 12/31/99 130,000
Unrealized holding gain for 2000 $ 30,000

66. (c) The unrealized holding loss for the trading securities ($25,000) is recognized in net income and reported on the income statement for the current period. However, the unrealized holding loss (that is temporary in nature) for the available for sale securities ($35,000) is reported as an element of other comprehensive income. This unrealized loss would not be included in the determination of net income or included on an “Income Statement”. However, they could be included on a “Statement of Income and Comprehensive Income” if that alternative reporting format were used. The unrealized holding gains and losses reported in other comprehensive income are included in the balance of accumulated other comprehensive income reported in stockholders’ equity.

67. (b) The noncurrent portfolio of marketable equity securities would be categorized as available-for-sale securities. Available-for-sale securities are reported at fair value with unrealized holding gains and losses reported as an element of other comprehensive income and are included in accumulated other comprehensive income in stockholders’ equity until realized.

68. (b) Held-to-maturity -- Amortized cost; Available-for-sale -- Fair value.

Under ASC 320, debt securities that the entity has the positive intent and ability to hold to maturity are classified as held-to-maturity securities and are reported as amortized cost.

Debt and equity securities not classified either as held-to-maturity or trading securities are classified as available-for-sale securities and are reported at fair value, with unrealized holding gains and losses reported as an element of other comprehensive income and included in the balance of accumulated other comprehensive income reported in stockholders' equity.

69. (d) $116,250.

Long-term investments in marketable equity securities at fair value
Plus: Net unrealized holding loss on long-term marketable equity securities
Cost of long-term investments in marketable equity securities

Unrealized holding gains and losses on the non-current portfolio of investments in marketable equity securities (categorized as available for sale securities) are reported in other comprehensive income and included in the balance of accumulated other comprehensive income reported in stockholders’ equity.

70. (a) Sales price (2,000 shares × $14) $28,000
Less: Brokerage commission (1,400)
Net proceeds $26,600
Less: Cost of investment (31,500)
Realized loss on trading security $(4,900)
If these securities had been categorized as available for sale, the total loss of $4,900 would have been recognized (in net income) as the prior year’s unrealized holding loss would not have been included (recognized) in earnings (net income), but rather would have been reported as an element of other comprehensive income. A reclassification adjustment for the unrealized holding loss ($2,000) would also be included in other comprehensive income.

71. (b) $60,000 and $40,000.

Marketable equity securities (equity securities with readily determinable fair values) are categorized as either trading securities (which are classified as current assets) or available-for-sale securities (which are classified as current or noncurrent assets), as appropriate.

Because Lark’s investments are long-term, they are categorized as available-for-sale securities.

Available for sale securities are reported at fair value with unrealized holding gains and losses reported in other comprehensive income and included in the balance of accumulated other comprehensive income reported in equity. The unrealized holding gain included in other comprehensive income for 2000 would be $60,000 ($240,000 current fair value vs. $180,000 prior period fair value). The net unrealized holding gain, included in the accumulated other comprehensive income as of December 31, 2000 is $40,000 ($60,000 current period unrealized holding gain less $20,000 prior period unrealized holding loss). Alternative calculation shown below.

Net unrealized holding gains at 12/31/00:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value at 12/31/00</td>
<td>$240,000</td>
</tr>
<tr>
<td>Cost</td>
<td>$200,000</td>
</tr>
<tr>
<td>Net unrealized holding gain</td>
<td>$40,000</td>
</tr>
</tbody>
</table>

72. (c) $40,000 current; $100,000 noncurrent.

Marketable equity securities (equity securities with readily determinable fair values) are categorized as either trading securities (which are classified as current assets) or available-for-sale securities (which are classified as current or noncurrent assets), as appropriate. Both trading and available-for-sale securities are reported at fair value. Therefore, the carrying value of both the current and noncurrent portfolios of marketable equity securities is the fair value of the portfolio, determined at the balance sheet date, and the valuation allowance, for both portfolios, is equal to the difference between the portfolio’s aggregate cost and its aggregate fair value, at the balance sheet date.

The “aggregate lower of cost or market value, applied to each security in the portfolio” is irrelevant information.

73. (a) $0. Marketable equity securities categorized as available for sale may be classified as current or non-current as appropriate, and are reported at fair value with unrealized holding gains and losses reported in other comprehensive income and included in the balance of accumulated other comprehensive income reported in stockholders’ equity. Therefore, transfer from the current to the noncurrent portfolio (or vice versa) of an available-for-sale security does not affect the reporting or accounting for the security.

Transfers of securities between categories (trading, available-for-sale, held-to-maturity) is accounted for at fair value, with the treatment of unrealized holding gains and losses dependent upon the categories transferred to and from.

74. (c) $80,000.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proceeds from sale</td>
<td>$240,000</td>
</tr>
<tr>
<td>Less cost (8,000 shares x $40)</td>
<td>$(320,000)</td>
</tr>
<tr>
<td>Loss on sale of investment</td>
<td>$(80,000)</td>
</tr>
</tbody>
</table>

Marketable equity securities (equity securities with readily determinable fair values) categorized as available for sale are reported at fair value with unrealized holding gains and losses reported in other comprehensive income and included in the balance of accumulated other comprehensive income reported in stockholders’ equity (excluded from earnings). As previously unrealized gains and losses have not been included (recognized) in earnings (net income), the gain or loss on the sale is the difference between the proceeds received and the original cost of the investment. A “reclassification adjustment” for the prior unrealized holding loss ($40,000 = 8,000 shares x $5 per share) would also be included in other comprehensive income for the year.
75. (d) Receipt of stock dividends does not constitute income nor a return of investment and therefore is not recorded under either the cost or equity method of accounting for investments in common stock. The cost of the shares previously held should be allocated to the total shares held after the receipt of a stock dividend or split.

76. (b) Since the decline in value occurred in 1999, the available-for-sale security was reduced to fair value with a related unrealized holding loss reported in other comprehensive income in 1999. In 2000, the asset continues to be carried at the same net value but the unrealized holding loss in accumulated other comprehensive income is removed and recognized as a loss in the determination of net income since the decline is considered to be permanent. The recognition of the loss (write-down to fair value) establishes a new cost basis which will not be changed for subsequent recoveries in fair value. However, subsequent unrealized holding gains and losses will be reported in other comprehensive income.

77. (d) $6,000. The valuation allowance related to the unrealized holding loss included in the income statement would be the valuation allowance for the portfolio of marketable equity securities categorized as trading securities. Unrealized holding gains and losses from a non-current portfolio of marketable equity securities (available for sale securities) are reported as an element of other comprehensive income in the reporting of comprehensive income. They would not be included in the determination of net income or included on an “Income Statement.” However, they could be included on a “Statement of Income and Comprehensive Income” if that alternative reporting format were used.

The amount of the valuation allowance for the marketable equity securities categorized as trading securities would be $6,000 ($45,000 aggregate cost – $39,000 aggregate fair value). The reporting value of both the trading and available-for-sale marketable equity securities is their fair value determined at the balance sheet date.

The "aggregate lower of cost or market value applied to each security in the portfolio" is irrelevant information.

78. (d) Unrealized holding gains and losses from a non-current portfolio of marketable equity securities (available for sale securities) are reported as an element of other comprehensive income in the reporting of comprehensive income. They would not be included in the determination of net income or included on an “Income Statement.” However, they could be included on a “Statement of Income and Comprehensive Income” if that alternative reporting format were used.

79. (a) $1,680,000 total stockholders’ equity.

<table>
<thead>
<tr>
<th>Common stock</th>
<th>$ 600,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional paid-in capital</td>
<td>800,000</td>
</tr>
<tr>
<td><strong>Total paid-in capital</strong></td>
<td><strong>$1,400,000</strong></td>
</tr>
<tr>
<td>Retained earnings:</td>
<td></td>
</tr>
<tr>
<td>Appropriated</td>
<td>$150,000</td>
</tr>
<tr>
<td>Unappropriated</td>
<td>200,000</td>
</tr>
<tr>
<td></td>
<td>350,000</td>
</tr>
<tr>
<td></td>
<td><strong>$1,750,000</strong></td>
</tr>
<tr>
<td>Less: Treasury stock at cost</td>
<td>$ 50,000</td>
</tr>
<tr>
<td>Accumulated other comprehensive income</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>(70,000)</td>
</tr>
<tr>
<td><strong>Total stockholders’ equity</strong></td>
<td><strong>$1,680,000</strong></td>
</tr>
</tbody>
</table>

80. (a) Retained earnings is decreased and a current liability for the cash dividend is recorded on the declaration date, January 15, 2000.
81. (d) The principal of the note $4,500,000

Plus Annual interest
$4,500,000 x 10% = $450,000

x 5 years

Total Interest for 5 years 2,250,000
Total Paid to Stockholder $6,750,000

**Notes for future reference:**
A scrip dividend may be used when corporations are temporarily short of cash. The liability may be called scrip dividend payable or in this example the corporation may issue notes payable.

The first key is that in this example the debit would be to retained earnings for $4,500,000 and a credit to notes payable for $4,500,000.

The second key is that the annual Interest accrued should be a debit to Interest Expense and a credit to interest payable for $450,000. The interest is not a part of the scrip dividend and should not affect retained earnings.

82. (b) Sold Treasury Stock

JE Cash (500 shares x $10) 5,000
Treasury Stock-Cost (500 shares x $6) 3,000
PIC Treasury Stock (500 shares x $4) 2,000

83. (d) The book value per share should be the total stockholder’s equity of $2,200,000 divided by the common shares outstanding of 45,000 shares for a total of $49 per share rounded. Note: The common shares outstanding is the 50,000 common shares issued less the 5,000 shares held in treasury for a net of 45,000 shares.

84. (a) A company cannot affect the income statement by trading in its own stock.

85. (c) Preferred stock is the equivalent term. Answers "a" and "b" are non-existent accounts and the equivalent IFRS account for additional paid in capital is share premium.

86. (a) Accumulated profit or loss on the IFRS statements would be the same as retained earnings on the US statements. Answers "b" and "d" are on the income statement and the reserve usually relates to accumulated after comprehensive income.

87. (d) Accounts included in accumulated other comprehensive income under US GAAP would be included under general or other reserves under IFRS. Answers a,b,c would be "contra" assets in the US.

88. (a) Tradable is not an acceptable method of recording investments under IFRS.

89. (d) The Fair Value through profit and loss method requires that the investment be traded in an active market.

90. (b) The unrealized gain on an investment classified as Fair Value through profit and loss is reported on the income statement.

91. (b) For available for sale securities IFRS requires that the unrealized gain be reported as a par of other comprehensive income.
92. (a) A gain in fair value for any investment classified as fair value through profit and loss is shown by the income statement.
Chapter Two
Solutions to Stockholders' Equity Problems

NUMBER 1

Part a.

1. There are four basic rights inherent in ownership of common stock. The first right is that common shareholders may participate in the actual management of the corporation through participation and voting at the corporate stockholders meeting. Second, a common shareholder has the right to share in the profits of the corporation through dividends declared by the board of directors (elected by the common shareholders) of the corporation. Third, a common shareholder has a pro rata right to the residual assets of the corporation if it liquidates. Finally, common shareholders have the right to maintain their interest (percent of ownership) in the corporation if additional common shares are issued by the corporation, by being given the opportunity to purchase a proportionate number of shares of the new offering. This last is most commonly referred to as a "preemptive right".

2. Preferred stock is a form of capital stock that is afforded special privileges not normally afforded common shareholders in return for giving up one or more rights normally conveyed to common shareholders. The most common right given up by preferred shareholders is the right to participate in management (voting rights), and, in return, the corporation grants one or more preferences to the preferred shareholder. The most common preferences granted to preferred shareholders are these:
   a. Dividends may be paid to common shareholders only after dividends have been paid to preferred shareholders.
   b. Claim ahead of common shareholders to residual assets (after creditors have been paid) in the case of corporate liquidation.
   c. Although the board of directors is under no obligation to declare dividends in any particular year, preferred shareholders may be granted a cumulative provision stating that any dividends not paid in a particular year must be paid in subsequent years before common shareholders may be paid any dividend.
   d. Preferred shareholders may be granted a participation clause that allows them to receive additional dividends beyond their normal dividend if common shareholders receive dividends of greater percentage than preferred shareholders. This participation may be on a one-to-one basis (fully participating); common shareholders may be allowed to exceed the rate paid to preferred shareholders by a defined amount before preferred shareholders begin to participate; or, the participation clause may have a maximum rate of participation to which preferred shareholders are entitled.
   e. Preferred shareholders may have the right to convert their preferred shares to common shares at a set future price no matter what the current market price of the common stock is.
   f. Preferred shareholders may also agree to have their stock callable by the corporation at a higher price than when the stock was originally issued. This item is generally coupled with another preference item to make the issue appear attractive to the market.

Part b.

1. Treasury stock is stock previously issued by the corporation but subsequently repurchased by the corporation and not retired but available for use at a subsequent date by the corporation.
2. Legal capital is that portion of corporate capital required by statute to be retained in the business to afford creditors a minimum degree of protection.
3. A stock right represents a privilege extended by the corporation to acquire additional shares (or fractional shares) of its capital stock.
4. A stock warrant is physical evidence of stock rights. The warrant specifies the number of rights conveyed, the number of shares to which the rightholder is entitled, the price at which the rightholder may purchase the additional shares, and the life of the rights (time period over which the rights may be exercised).
NUMBER 2

1. Under the cost method, treasury stock is debited for the purchase price of the shares even though the purchase price is less than the par value. Under the par value method, treasury stock is debited for the par value of the shares, and a separate paid-in capital account is credited for the excess of par value over the purchase price.

2. Under the cost method, treasury stock is debited for the purchase price of the shares. Under the par value method, treasury stock is debited for the par value of the shares, and the debit for the excess of the purchase price over the par value is assigned to additional paid-in capital arising from past transactions in the same class of stock and/or retained earnings.

3. Under the cost method, treasury stock is credited for the original cost (purchase price) of the shares, and the excess of the original cost (purchase price) over the sales price first is debited to additional paid-in capital from earlier sales or retirements of treasury stock, and any remainder then is debited to retained earnings.

   Under the par value method, treasury stock is credited for the par value of the shares, and the excess of the sales price over the par value is credited to additional paid-in capital from sale of treasury stock.

4. Under the cost method, treasury stock is credited for the original cost (purchase price) of the shares, and the excess of the sales price over the original cost (purchase price) is credited to additional paid-in capital from sale of treasury stock.

   Under the par value method, treasury stock is credited for the par value of the shares, and the excess of the sales price over the par value is credited to additional paid-in capital from sale of treasury stock.

5. There is no effect on net income as a result of treasury stock transactions.

NUMBER 3

Fay, Inc.

STOCKHOLDERS' EQUITY SECTION OF BALANCE SHEET
December 31, 1997

Common stock, $10 par; 2,000,000 shares authorized; 840,000 shares issued; 829,500 shares outstanding $ 8,400,000 [1]
Additional paid-in capital 2,485,000 [2]
Retained earnings 4,765,000 [3]
Less: Accumulated other comprehensive income $ 20,000 [4]
Treasury stock, at cost, 10,500 shares 130,000 [5] (150,000)
Total stockholders' equity $15,500,000

Explanations of Amounts

[1] Common stock issued

<table>
<thead>
<tr>
<th>Date</th>
<th>Shares</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance</td>
<td>12/31/96</td>
<td>800,000</td>
</tr>
<tr>
<td>5% stock dividend issued</td>
<td>3/2/97</td>
<td>40,000</td>
</tr>
<tr>
<td>Balance</td>
<td>12/31/97</td>
<td>840,000</td>
</tr>
</tbody>
</table>
### Additional paid-in capital

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, 12/31/96</td>
<td>$2,295,000</td>
</tr>
<tr>
<td>Treasury stock reissued, 1/15/97</td>
<td></td>
</tr>
<tr>
<td>($225,000 - $195,000 ($325,000 × 60%))</td>
<td>30,000</td>
</tr>
<tr>
<td>Stock dividend issued, 3/2/97</td>
<td></td>
</tr>
<tr>
<td>($14 - $10) × 40,000 shares</td>
<td>160,000</td>
</tr>
<tr>
<td>Balance, 12/31/97</td>
<td>$2,485,000</td>
</tr>
</tbody>
</table>

### Retained earnings

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, 12/31/96</td>
<td>$2,465,000</td>
</tr>
<tr>
<td>Stock dividend issued, 3/2/97</td>
<td></td>
</tr>
<tr>
<td>($14 × 40,000 shares)</td>
<td>(560,000)</td>
</tr>
<tr>
<td>Net income for 1997</td>
<td>2,860,000</td>
</tr>
<tr>
<td>Balance, 12/31/97</td>
<td>$4,765,000</td>
</tr>
</tbody>
</table>

### Net unrealized loss on noncurrent marketable equity securities

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, 12/31/97</td>
<td>$20,000</td>
</tr>
<tr>
<td>($20 - $18) × 10,000 shares</td>
<td></td>
</tr>
</tbody>
</table>

### Treasury stock at cost

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>(10,000 ÷ 25,000 × $325,000)</td>
<td>$130,000</td>
</tr>
</tbody>
</table>

### NUMBER 4

**a.** The subscription of common stock at a price in excess of the par value of the common stock is accounted for at the date of subscription as follows:

- Stock subscriptions receivable is debited for the subscription price of the common stock.
- Common stock subscribed is credited for an amount representing the par value of the common stock that will be issued when the stock subscription is collected.
- Additional paid-in capital is credited for the excess of the subscription price of the common stock over its par value.

**b.** The issuance for cash of no par value common stock at a price in excess of the stated value of the common stock is accounted for as follows:

- Cash is debited for the proceeds from the issuance of the common stock.
- Common stock is credited for the stated value of the common stock.
- Additional paid-in capital is credited for the excess of the proceeds from the issuance of the common stock over its stated value.

**c.** The date of declaration is the date when the liability for dividends payable is recorded by a debit to retained earnings and a credit to dividends payable.

The date of stockholders of record is the date that determines which stockholders will receive dividends on the payment date. No journal entry is made at this date.

The date of payment is the date when the dividends are paid and is recorded by a debit to dividends payable and a credit to cash.

**d.** The effect of an ordinary 10 percent common stock dividend is that an amount equal to the fair value of the additional common stock issued is transferred from retained earnings to common stock and additional paid-in capital. There is no effect on total stockholders’ equity.
a. Mart, Inc.
STATEMENT OF RETAINED EARNINGS
For the Year Ended December 31, 1999

Balance, December 31, 1998
   As originally reported $3,250,000
   Less prior period adjustment from error overstating inventories at December 31, 1998 $200,000
   Less income tax effect 60,000
   As restated 3,110,000
Net income 2,250,000
Deduct cash dividends on
   Preferred stock 450,000 [1]
   Common stock 2,480,000 [2] 2,930,000
Balance, December 31, 1999 $2,430,000

b. Mart, Inc.
STOCKHOLDERS' EQUITY
December 31, 1999

Preferred stock, $50 par value, 9% cumulative, convertible; 250,000 shares authorized; 100,000 shares issued and outstanding $5,000,000
Common stock, $5 par value; 6,000,000 authorized; 2,500,000 shares issued, of which 10,000 shares are held in treasury 12,500,000 [3]
Additional paid-in capital 11,450,000 [4]
Retained earnings 2,430,000
Less contra accounts:
   Common stock in treasury, 10,000 shares at cost $160,000 [5]
   Accumulated other comprehensive income 50,000 [6] 210,000
$31,170,000

c. Mart, Inc.
COMPUTATION OF BOOK VALUE
PER SHARE OF COMMON STOCK
December 31, 1999

Total stockholders' equity $31,170,000
Deduct allocation to preferred stock, at liquidation value [100,000 shares × $55] 5,500,000
Allocation to common stock [Shares outstanding 2,490,000 (2,500,000 – 10,000)] 25,670,000
Book value per share of common stock [$25,670,000 ÷ 2,490,000] $10.31
**Explanation of Amounts**

[1] **Preferred stock dividend**

- Par value of all outstanding preferred stock shares $5,000,000

Dividend rate 9%

Dividends paid on preferred stock $450,000

[2] **Common stock dividend**

- Number of common stock shares outstanding, 12/31/98 2,000,000
- Number of common stock shares issued, 4/30/99 500,000
- Total common stock shares issued 2,500,000
- Less: Treasury stock shares acquired 2/1/99 20,000
- Shares outstanding, 7/1/99 2,480,000

Dividends paid (2,480,000 × $1) $2,480,000

[3] **Common stock shares issued (see [2] above)** 2,500,000

Par value per share $5

Common stock at par value ($5 × 2,500,000) $12,500,000

[4] **Additional paid-in capital**

- Balance, December 31, 1998 $7,500,000
- From issuance of stock:
  - 100,000 shares of preferred stock on 1/5/99
    - [100,000 × $4 ($54 – $50)] 400,000
  - 500,000 shares of common stock on 4/30/99
    - [500,000 × $7 ($12 – $5)] 3,500,000
- From sale of 10,000 shares of treasury stock on 11/6/99
  - [10,000 × $5 ($21 – $16)] 50,000

Balance, December 31, 1999 $11,450,000

<table>
<thead>
<tr>
<th>Shares</th>
<th>Amount of cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000</td>
<td>$320,000</td>
</tr>
<tr>
<td>10,000</td>
<td>160,000</td>
</tr>
<tr>
<td>10,000</td>
<td>$160,000</td>
</tr>
</tbody>
</table>

[5] **Common stock in treasury**

- Stock reacquired, 2/1/99 20,000 $320,000
- Stock sold, 11/6/99 10,000 160,000

<table>
<thead>
<tr>
<th>Shares</th>
<th>Amount of cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000</td>
<td>$320,000</td>
</tr>
<tr>
<td>10,000</td>
<td>160,000</td>
</tr>
<tr>
<td>10,000</td>
<td>$160,000</td>
</tr>
</tbody>
</table>

[6] **Excess of cost of long-term marketable equity security**

- Cost of marketable equity security $200,000
- Fair market value of marketable equity security, 12/31/99
  - [$15 × 10,000 shares] 150,000

<table>
<thead>
<tr>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$50,000</td>
</tr>
</tbody>
</table>
1. $12,000. Dividend Per share \( ($100 \text{ par} \times 6\%) \) $6
   
   \[ \times \text{Number of shares outstanding} \quad 2,000 \]
   
   Preferred stock dividends \( 12,000 \)

2. $165,000. Number of common shares outstanding
   
   Jan. 1 Beginning balance \( 100,000 \)
   
   Feb. 1 Issued for Land \( 13,000 \)
   
   Mar. 1 Treasury shares acquired \( 5,000 \)
   
   Oct. 1 Treasury shares sold \( 2,000 \)
   
   Shares outstanding \( 110,000 \)
   
   Nov. 4 Declared cash dividend per share \( \times \$1.50 \)
   
   Cash dividend to common stockholders \( \$165,000 \)

3. $720,000. Property dividends are recorded at their fair market value at the date of declaration (May 10).

4. 113,000. Number of common shares issued:
   
   Jan. 1 Beginning balance \( 100,000 \)
   
   Feb. 1 Issued for land \( 13,000 \)
   
   Total shares issued \( 113,000 \)

   Treasury stock is issued stock; however, it is not outstanding stock.

5. $113,000. Number of common shares issued \( 113,000 \)
   
   Par value per share \( \times \$1 \)
   
   Amount of common stock issued \( \$113,000 \)

6. $934,000. Additional paid-in capital:
   
   Jan. 1. Beginning balance \( \$800,000 \)
   
   Feb. 1 Shares issued for land \( 13,000 \text{ shares} \times (\$11 - 1 \text{ par}) \)
   
   Oct. 1 Reissued treasury shares \( 2,000 \text{ shares} \times (\$16 - \$14 \text{ cost}) \)
   
   Dec. 31 Ending balance \( \$934,000 \)

7. $42,000. Number of treasury shares
   
   Mar. 1 Shares acquired \( 5,000 \)
   
   Oct. 1 Shares reissued \( 2,000 \)
   
   Dec. 31 Treasury shares \( 3,000 \)
   
   Cost per share on Mar. 1 \( \times \$14 \)
   
   Total cost of treasury stock @ December 31 \( \$42,000 \)

8. $24.86. Total stockholders' equity 12/31/99 \( \$2,686,000 \)
   
   Less: Preferred stock equity 12/31/99 \( (200,000) \)
   
   Common stock equity 12/31/99 \( \$2,486,000 \)
   
   # Common shares outstanding \( \div 100,000 \)
   
   Book value per common share \( \$24.86 \)
Number 7

a. Brady should account for the purchase of the treasury stock on August 15, 2000, by debiting treasury stock and crediting cash for the cost of the purchase (1,000 shares × $12 per share). Brady should account for the sale of the treasury stock on September 14, 2000, by debiting cash for the selling price (500 shares × $14 per share), crediting treasury stock for cost (500 shares × $12 per share), and crediting additional paid-in capital from treasury stock transactions for the excess of the selling price over the cost (500 shares × $2 per share). The remaining treasury stock (500 shares × $12 per share) should be presented separately in the stockholders' equity section of Brady's December 31, 2000, balance sheet as an unallocated reduction of stockholders' equity. These shares are considered issued but not part of common stock outstanding.

b. Brady should account for the stock dividend by debiting retained earnings for $16 per share (the market value of the stock in October 2000, the date of the stock dividend) multiplied by the 2,000 shares distributed. Brady should then credit common stock for the par value of the common stock ($10 per share) multiplied by the 2,000 shares distributed, and credit additional paid-in capital for the excess of the market value ($16 per share) over the par value ($10 per share) multiplied by the 2,000 shares distributed. Total stockholders' equity does not change, but, because this is considered a small stock dividend, recognition has been made of a capitalization of retained earnings equivalent to the market value of the additional shares resulting from the stock dividend.

c. Brady should account for the cash dividend on December 20, 2000, the declaration date, by debiting retained earnings and crediting cash dividends payable for $1 per share multiplied by the number of shares outstanding. A cash dividend is a distribution to the corporation's stockholders. The liability for this distribution is incurred on the declaration date, and it is a current liability because it is payable within one year (January 10, 2001). The effect of the cash dividend on Brady's balance sheet at December 31, 2000, is an increase in current liabilities and a decrease in retained earnings.

Number 8

a.

**Computation of Cox's Goodwill**  
**Implicit in the Terms of the Common Stock Issuance**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash paid by Rice for 1,000 shares</td>
<td>$ 86,000</td>
</tr>
<tr>
<td><strong>Contribution by Cox</strong></td>
<td></td>
</tr>
<tr>
<td>Current fair value of assets</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$ 16,500</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>20,200</td>
</tr>
<tr>
<td>Merchandise inventory</td>
<td>45,000</td>
</tr>
<tr>
<td>Prepaid insurance</td>
<td>1,900</td>
</tr>
<tr>
<td>Equipment</td>
<td>40,000</td>
</tr>
<tr>
<td><strong>Total Current fair value of assets</strong></td>
<td>123,600</td>
</tr>
<tr>
<td>Current fair value of liabilities assumed</td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>30,500</td>
</tr>
<tr>
<td>Note payable</td>
<td>10,000</td>
</tr>
<tr>
<td>Loan payable, delivery van</td>
<td>3,500</td>
</tr>
<tr>
<td>Interest payable</td>
<td>600</td>
</tr>
<tr>
<td>Payroll taxes withheld and accrued</td>
<td>2,100</td>
</tr>
<tr>
<td><strong>Total Current fair value of liabilities</strong></td>
<td>46,700</td>
</tr>
<tr>
<td><strong>Net contribution by Cox for 1,000 shares</strong></td>
<td>76,900</td>
</tr>
<tr>
<td><strong>Cox's goodwill</strong></td>
<td>$ 9,100</td>
</tr>
</tbody>
</table>
b. **Cox Stationers, Inc.**

**BALANCE SHEET**

*January 1, 2000*

### Assets

<table>
<thead>
<tr>
<th>Current Assets:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$102,500 [1]</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>$23,500</td>
</tr>
<tr>
<td>Less allowance for doubtful accounts</td>
<td>3,300</td>
</tr>
<tr>
<td>Merchandise inventory</td>
<td>45,000</td>
</tr>
<tr>
<td>Prepaid insurance</td>
<td>1,900 [2]</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>169,600</td>
</tr>
<tr>
<td>Equipment</td>
<td>40,000</td>
</tr>
<tr>
<td>Goodwill</td>
<td>9,100</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$218,700</td>
</tr>
</tbody>
</table>

### Liabilities and Stockholders' Equity

<table>
<thead>
<tr>
<th>Current Liabilities:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Note payable, bank</td>
<td>$10,000</td>
</tr>
<tr>
<td>Loan payable, delivery van</td>
<td>3,500</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>30,500</td>
</tr>
<tr>
<td>Accrued interest</td>
<td>600 [3]</td>
</tr>
<tr>
<td>Payroll taxes withheld and accrued</td>
<td>2,100</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>46,700</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stockholders' Equity:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Common stock, $50 par; authorized 7,500 shares; issued and outstanding 2,000 shares</td>
<td>100,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>72,000 [4]</td>
</tr>
<tr>
<td><strong>Total stockholders' equity</strong></td>
<td>172,000</td>
</tr>
</tbody>
</table>

| **Total liabilities and stockholders' equity** | $218,700 |

### Explanations of Amounts:

<table>
<thead>
<tr>
<th>[1] Cash</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, 12/31/99</td>
<td>$16,500</td>
</tr>
<tr>
<td>1/1/00, sale of common stock to Rice</td>
<td>86,000</td>
</tr>
<tr>
<td><strong>Balance, 1/1/00</strong></td>
<td>$102,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>[2] Prepaid insurance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid, 7/1/99</td>
<td>$3,800</td>
</tr>
<tr>
<td>Prepaid, 12/31/99 (× 1/2)</td>
<td>$1,900</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>[3] Accrued interest on note payable</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual interest ($10,000 × 12%)</td>
<td>$1,200</td>
</tr>
<tr>
<td>July 1-December 31, 1999 (× 1/2)</td>
<td>$600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>$218,700</td>
</tr>
<tr>
<td>Deduct liabilities</td>
<td>46,700</td>
</tr>
<tr>
<td>Total stockholders' equity</td>
<td>172,000</td>
</tr>
<tr>
<td>Deduct common stock (2,000 shares × $50)</td>
<td>100,000</td>
</tr>
<tr>
<td><strong>Additional paid-in capital</strong></td>
<td>$72,000</td>
</tr>
</tbody>
</table>
1. **T** Investments (debt or equity) bought and held principally for the purpose of selling them in the near term should be classified as trading securities.

2. **H** Investments in debt securities are classified as "held-to-maturity" only if the entity has the **positive intent and ability** to hold the investment to maturity.

3. **A** Investments in debt or (marketable) equity securities not classified as trading securities or held-to-maturity securities are classified as available-for-sale. As the debt security is to be sold in 3 years it is not a trading security (near term sale) nor a held-to-maturity security.

4. **A** Equity securities (marketable) not classified as trading securities are classified as available-for-sale. As the stock is not intended to be sold in the near term, it is not a trading security. Equity securities can not be classified as held-to-maturity (no maturity date).

5. (G) **$100,000.** Held-to-maturity securities are reported at amortized cost. As the security was purchased at par or face value, its cost is amortized cost (no premium or discount to amortize).

6. (I) **$155,000.** Trading securities are reported at their fair market value as of the balance sheet date.

7. (J) **$160,000.** Available-for-sale securities are reported at their fair market value as of the balance sheet date.

8. (D) **$15,000. Loss** The gain or loss on available-for-sale securities is the difference between the cost of the security and its selling price.

   Cost of GHI  $190,000  
   Selling price    175,000  
   Loss on sale     15,000  

   Previous unrealized holding gains and losses have not been recognized in income; the valuation allowance and unrealized holding gain/loss in accumulated other comprehensive income are equal and offset each other.

9. (B) **$5,000. Loss** The unrealized holding gain/loss recognized on the income statement relates to trading securities. As previous unrealized holding gains/loss have been recognized in income, the current unrealized holding gain or loss is the difference between its current fair value and its carrying value (prior fair value).

   Fair value 12/31/99    $155,000  
   Carrying value  
   Cost   $150,000  
   Valuation allowance    10,000  
   Fair value 12/31/98    160,000  
   Unrealized holding loss, 1999    $ (5,000)  

10. (C) **$10,000. Loss** The (net) unrealized holding gain/loss related to available-for-sale securities is included in accumulated other comprehensive income reported in equity.

   Fair market value, 12/31/99    $160,000  
   Cost    170,000  
   Unrealized holding loss    $ (10,000)
Chapter Three Inventories

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  Perpetual or Book Inventories
  Gross Profit Method

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  Purchasing, Handling and Storage Costs
  Trade Discounts

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    Weighted Average -- Periodic
    Moving Average -- Perpetual
  FIFO
  LIFO
    (1) Unit Based LIFO
    (2) Dollar Value LIFO
  Retail Method
    Conventional
    Average Cost
    FIFO Cost
    Lower of FIFO Cost or Market
    LIFO Cost
    Lower of LIFO Cost or Market
    Dollar Value LIFO

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  Percentage
  Cost

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Chapter Three
Inventories (Accounting Standards Codification ASC Topic 330)

DEFINITION
The term "inventory" designates tangible personal property, which is:
1. Held for sale in the ordinary course of business,
2. In process of production for such sale, or
3. To be currently consumed in production of goods and services to be available for sale.

MAJOR CATEGORIES
1. Merchandise—items purchased for resale
2. Raw Materials—materials on hand not yet placed into production
3. Supplies—manufacturing supplies only, others are prepaid expenses
4. Work in process—direct material, labor and overhead cost of unfinished units
5. Finished goods

The major objective of inventory accounting is proper income measurement through the process of matching costs against revenues. The inventory method used should be consistently applied. The primary basis of accounting for inventories is cost which is the price paid plus the direct or indirect cost of bringing the article to its existing condition or location.

METHODS OF INVENTORY MEASUREMENT
1. Periodic Method. The asset costs are accumulated in inventory and in related purchases accounts. The cost expiration is determined through use of a cost of goods sold account and is affected by the period change in the asset inventories. A physical inventory is necessary to prepare statements.

2. Perpetual or Book Inventories. The cost of goods sold can be determined with each sale or issuance of raw material to production. The physical inventory can be taken on a cycle basis with the objective of verifying the inventory records. A perpetual inventory system is costly to install and maintain.

3. Gross Profit Method. The gross profit method is used to estimate the inventory in situations in which it is not desirable or possible to take a physical inventory. It is used mostly for interim financial statements or in determining inventory in the event of a fire or other casualty. The gross profit method is not appropriate for year end financial reporting purposes as it does not provide for a "proper determination of the realized income"; an estimate of cost of goods sold and ending inventory is not adequate. The gross profit method does not provide for the taking or pricing (costing) of physical inventory on hand under any cost flow assumption.

Example:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>$12,000</td>
</tr>
<tr>
<td>Sales</td>
<td>100,000</td>
</tr>
<tr>
<td>Gross profit percentage</td>
<td>25%</td>
</tr>
<tr>
<td>Purchases</td>
<td>80,000</td>
</tr>
</tbody>
</table>

Compute the ending inventory.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$100,000</td>
</tr>
<tr>
<td>Gross profit 25%</td>
<td>25,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>$75,000</td>
</tr>
</tbody>
</table>
**Problem**: The Washington Company estimates the cost of its physical inventory at 3/31/X6 for use in an interim financial statement. The rate of markup on cost is 25%. The following account balances are available:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>$12,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>80,000</td>
</tr>
<tr>
<td>Cost of goods available for sale</td>
<td>$92,000</td>
</tr>
<tr>
<td>Less: Cost of goods sold</td>
<td>75,000</td>
</tr>
<tr>
<td>Ending inventory</td>
<td>$17,000</td>
</tr>
</tbody>
</table>

The estimate of the cost of inventory at March 31 would be:

- a. $137,000
- b. $130,000
- c. $112,000
- d. $102,000

Answer: (b)

\[
\text{Cost of sales} = \frac{\text{Sales during March}}{1.25} = \frac{140,000}{1.25} = 112,000
\]

\[
\text{Inventory at 3/31/X6} = \text{Inventory 3/1/X6} + \text{Purchases during March} - \text{Sales during March} = 160,000 + 86,000 - 140,000 = 130,000
\]

**ADJUSTMENTS TO INVENTORY COST**

1. **Cash Discounts**. Should be treated as a reduction of the cost of purchases. Because of the difficulty of associating a discount with a particular purchase, discounts are frequently treated as other income or as a reduction of purchases in the income statement. Theoretically, discounts are cost reductions since income cannot be generated by purchasing goods.

Discounts are usually handled in one of two ways in the accounts:

**Use of "Discounts Lost" Account. (Net Price Method)** In the use of a "discounts lost" account, it is assumed the discount will be taken and the amount originally recorded in purchases and accounts payable is net of the discount.

**Example**: Merchandise is purchased for $100 with terms of 2/10 net 30.

**Journal Entry**:

\[
\begin{align*}
\text{Purchases} & \quad 98 \\
\text{A/P} & \quad 98 \\
\end{align*}
\]

Inventory recorded at cost less discount.

\[
\begin{align*}
\text{A/P} & \quad 98 \\
\text{Cash} & \quad 98 \\
\end{align*}
\]

Payment for inventory within the discount period.

Assume in the above example that the payment is **not** made within the discount period and $100 must be remitted.

\[
\begin{align*}
\text{A/P} & \quad 98 \\
\text{Discounts lost} & \quad 2 \\
\text{Cash} & \quad 100 \\
\end{align*}
\]

Inventory A/P paid—no discount taken.
The use of a discounts lost account has two advantages:

a. The inventory can be priced at cost less the discount. In most situations it is impossible to associate the discount with the inventory at a later date.

b. Management can evaluate the effectiveness of the company's handling of discounts. The "discounts lost" account discloses what has been lost in discounts not taken. The other method only shows the amount taken (not providing any indication or control of the discounts not taken).

Use of "Discounts" Account. (Gross Price Method) Same example as above.

Journal Entry:

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases</td>
<td>100</td>
<td>A/P</td>
</tr>
<tr>
<td>A/P</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Inventory recorded at cost.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/P</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Discount</td>
<td>2</td>
<td>Cash</td>
</tr>
<tr>
<td>Cash</td>
<td>98</td>
<td></td>
</tr>
</tbody>
</table>

Payment made taking 2% discount.

If this method is used, discounts are deducted from purchases.

**Problem:** The use of a Discounts Lost account implies that the recorded cost of a purchased inventory item is its:

a. Invoice price
b. Invoice price plus the purchase discount lost.
c. Invoice price less the purchase discount taken.
d. Invoice price less the purchase discount allowable whether or not taken.

**Answer:** (d).

2. **Transportation Costs.** Should be added to inventory cost.

3. **Purchasing, Handling and Storage Costs.** These costs should also be added to inventory cost, but because of the difficulty of association, are usually expensed as period costs.

4. **Trade Discounts.** Trade discounts (also referred to as volume or quantity discounts) are discounts from a catalog or list price, used to establish a pricing policy and, therefore, do not enter into the accounting system. These discounts are usually stated as a percentage of the list price and are deducted from the list or catalog price to determine the recorded invoice price. Each discount applies to the net price computed after deducting the previous discount.

**Example:** Merchandise is purchased with a list price of $10,000 subject to trade discounts of 20%, 10% and 5%. The invoice price is calculated as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>List price</td>
<td>$10,000</td>
</tr>
<tr>
<td>Less 20% discount (20% × $10,000)</td>
<td>(2,000)</td>
</tr>
<tr>
<td></td>
<td>$ 8,000</td>
</tr>
<tr>
<td>Less 10% discount (10% × $8,000)</td>
<td>(800)</td>
</tr>
<tr>
<td></td>
<td>$ 7,200</td>
</tr>
<tr>
<td>Less 5% discount (5% × $7,200)</td>
<td>(360)</td>
</tr>
<tr>
<td>Invoice price before cash discount</td>
<td>$ 6,840</td>
</tr>
</tbody>
</table>
INVENTORY VALUATION METHODS

1. **Specific Identification.** Individual inventory lots purchased or manufactured are separately identified. When items are sold or otherwise disposed of, the actual cost of the specific item is assigned to the transaction and the ending inventory consists of the actual costs of the specific items on hand. Usually used for high cost items which are individually identifiable (autos, appliances, jewelry, etc.).

2. **Average Cost.** The average cost flow assumption assumes that all costs and units are merged (commingled) so that no specific item or cost can be separately identified. Both the cost of goods sold and ending inventory are valued at the average unit cost. The average cost method may be used with either the periodic or perpetual inventory system.

   a) **Weighted Average—Periodic:** The cost of units is calculated at the end of the period based upon the average price paid (including freight, etc.), weighted by the number of units purchased at each price (the cost of goods available for sale divided by the number of units available for sale).

   **Illustration of Weighted Average**

<table>
<thead>
<tr>
<th>Units</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1 Balance</td>
<td>200</td>
<td>$1.50</td>
</tr>
<tr>
<td>1/5 Purchase</td>
<td>300</td>
<td>$1.60</td>
</tr>
<tr>
<td>1/15 Sold 400 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/18 Purchase</td>
<td>200</td>
<td>$1.65</td>
</tr>
<tr>
<td>1/27 Purchase</td>
<td>300</td>
<td>$1.78</td>
</tr>
<tr>
<td>1,000</td>
<td></td>
<td>$1,644</td>
</tr>
</tbody>
</table>

   Weighted Average Unit Cost = $1,644 ÷ 1,000 units = $1.644 per unit

   Ending inventory (600 units @ $1.644) $986.40

   b) **Moving Average — Perpetual:** The cost of units is calculated in the same manner as was used for weighted average except a new weighted average cost is calculated after each purchase. This average cost is used to determine the cost of each unit sold prior to the next purchase.

   **Illustration of Moving Average**

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>Total Units</th>
<th>Average Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1 Balance</td>
<td>$300</td>
<td>200</td>
</tr>
<tr>
<td>1/5 Purchase</td>
<td>$780</td>
<td>500</td>
</tr>
<tr>
<td>(300 units @ $1.60 = $480)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/15 Sale</td>
<td>$156</td>
<td>100</td>
</tr>
<tr>
<td>(400 units @ $1.56 Av. = $624)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/18 Purchase</td>
<td>$486</td>
<td>300</td>
</tr>
<tr>
<td>(200 units @ $1.65 = $330)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/27 Purchase</td>
<td>$1,020</td>
<td>600</td>
</tr>
<tr>
<td>(300 units @ $1.78 = $534)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Ending Inventory (600 units @ $1.70) $1,020.

3. **FIFO (First In, First Out):** An assumption that goods are sold in the chronological order purchased. The ending inventory will consist of the last purchases made during the accounting period.

4. **LIFO (Last In, First Out):** The last goods purchased are assumed to be sold. The ending inventory consists of the goods first purchased.
The use of LIFO and the techniques for its application stem from federal tax law and regulations. If it is used for either tax or financial statement purposes, it must be used for the other. Historically, LIFO was considered a "cost" method and, therefore, could not be used in conjunction with the lower of cost or market method of inventory valuation. In the early 1980's, federal tax rules re. conformity were relaxed allowing the application of LCM with LIFO for financial statement purposes (however, not for tax purposes). The use of LIFO for one type of inventory does not preclude the use of other methods for other inventory categories for either tax or financial statement purposes. You must obtain permission from the Internal Revenue Service to use the LIFO method and/or to change inventory methods.

(1) **Unit Based LIFO.** In the year of changeover to LIFO, the beginning inventory in the year of change must be restated. If permission is granted to change to LIFO in 19X2, the January 1, 19X2, inventory must be converted to weighted average and will become the BASE. Conversion to weighted average will mean that all units in the BASE will have the same cost.

For example:

Ending 19X1 inventory on a FIFO basis consisted of:

<table>
<thead>
<tr>
<th>Date</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/2</td>
<td>1,000</td>
<td>$6.00</td>
<td>$ 6,000</td>
</tr>
<tr>
<td>10/15</td>
<td>2,000</td>
<td>$7.00</td>
<td>14,000</td>
</tr>
<tr>
<td>11/20</td>
<td>1,000</td>
<td>$8.00</td>
<td>8,000</td>
</tr>
<tr>
<td>12/15</td>
<td>1,000</td>
<td>$7.00</td>
<td>7,000</td>
</tr>
<tr>
<td></td>
<td>5,000</td>
<td></td>
<td>$35,000</td>
</tr>
</tbody>
</table>

Weighted average $7.00 per unit.

Normally, a LIFO inventory will consist of a base and **layers**, which we call LIFO layers, brought about by subsequent increases in inventory. We must concern ourselves with the valuation of these increases or, as they are sometimes called, increments. In our example, we revalued the beginning inventory of 19X2, the base, to weighted average. Assume that at the end of 19X2 the inventory has **increased** from 5,000 to 7,000 units with purchases during the year as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/17</td>
<td>2,400</td>
<td>$7.25</td>
<td>$17,400</td>
</tr>
<tr>
<td>2/22</td>
<td>4,600</td>
<td>$7.00</td>
<td>32,200</td>
</tr>
<tr>
<td>6/30</td>
<td>2,000</td>
<td>$8.00</td>
<td>16,000</td>
</tr>
<tr>
<td>7/27</td>
<td>2,500</td>
<td>$9.00</td>
<td>22,500</td>
</tr>
<tr>
<td>10/28</td>
<td>1,500</td>
<td>$8.00</td>
<td>12,000</td>
</tr>
<tr>
<td></td>
<td>13,000</td>
<td></td>
<td>$100,000</td>
</tr>
</tbody>
</table>

Average $7.70

At this point, an election must be made to value increases in inventory by one of three methods:

1. **FIFO**
2. **LIFO**
3. **Weighted Average**

Purchases

<table>
<thead>
<tr>
<th>Purchases</th>
<th>Purchases</th>
<th>Purchases</th>
<th>Purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/28 1,500 @ $8 = $12,000</td>
<td>1/17 2,000 @ $7.25 = $14,500</td>
<td>2,000 @ $7.70 = $15,400</td>
<td></td>
</tr>
<tr>
<td>7/27  500 @ $9 = 4,500</td>
<td>LIFO LAYER 16,500</td>
<td>14,500</td>
<td></td>
</tr>
<tr>
<td>BASE</td>
<td>35,000</td>
<td>35,000</td>
<td>15,400</td>
</tr>
<tr>
<td>INV. VALUE</td>
<td>$51,500</td>
<td>$49,500</td>
<td>$50,400</td>
</tr>
</tbody>
</table>

Subsequent layers must be valued the same way once an election is made to value LIFO layers by any of the three methods. The question may reasonably be asked that--if this is a LIFO inventory method, why is it that increases can be valued by FIFO or weighted average? It is the layers that are valued on a LIFO basis rather than the value of the content of a particular layer or inventory increment. When there is a decrease in inventory, the last layer to be formed is the first to be costed out. Assume an inventory as follows:
On 12/31/X5, the inventory dropped to 8,500 units. The ending inventory would be valued at:

<table>
<thead>
<tr>
<th>Layer</th>
<th>Units</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASE</td>
<td>5,000</td>
<td>$35,000</td>
</tr>
<tr>
<td>LAYER</td>
<td>2,000</td>
<td>$15,400</td>
</tr>
<tr>
<td>LAYER</td>
<td>1,500</td>
<td>$12,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$62,400</td>
</tr>
</tbody>
</table>

Once the base or a layer has been costed, i.e., charged to cost of goods sold, it is **permanently removed** from the inventory; however, see Chapter 12, Interim Financial Statements, for the treatment of the liquidation of base period inventories during an interim period.

Further, there are some who advocate maintaining the basic LIFO inventory intact even though a temporary liquidation has occurred at year-end. This is done by charging cost of goods sold with current costs and crediting the account, "Excess of Replacement Cost Over LIFO Cost of Basic Inventory Temporarily Liquidated," for that part of replacement cost in excess of LIFO cost. When the inventory is replenished, the "Excess ... " account is removed and the goods acquired replaced in inventory at their LIFO cost. The "Excess ... " account is a current liability.

**Dollar Value LIFO.** As is characteristic of all LIFO methods, the dollar value LIFO inventory consists of a base, and layers when the inventory has increased during the period. In dollar value, however, the inventory is expressed in terms of dollars instead of units. This is necessary if LIFO is to be used in businesses in which units change from year to year and cannot be reduced to a common unit of measurement such as tons, bushels, barrels or cubic yards.

The first year inventory is the base and a price index is constructed from a sampling of inventory items to determine the price change in subsequent years in relation to the base. The price index is used to convert the subsequent year inventory to base year prices so that it can be determined if the inventory has increased. For example:

Assume that the Royster Appliance Company converted to dollar value LIFO on January 1, 19X2, and the inventory in subsequent years was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/X1</td>
<td>$15,000</td>
<td>100</td>
</tr>
<tr>
<td>12/31/X2</td>
<td>16,800</td>
<td>105</td>
</tr>
<tr>
<td>12/31/X3</td>
<td>21,280</td>
<td>112</td>
</tr>
<tr>
<td>12/31/X4</td>
<td>22,680</td>
<td>126</td>
</tr>
<tr>
<td>12/31/X5</td>
<td>23,970</td>
<td>141</td>
</tr>
<tr>
<td>12/31/X6</td>
<td>30,000</td>
<td>150</td>
</tr>
</tbody>
</table>

To determine whether an increment has occurred, express the inventory in all years in terms of base year prices.

<table>
<thead>
<tr>
<th>Year</th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19X1</td>
<td>$15,000</td>
</tr>
<tr>
<td>19X2</td>
<td>$16,800 ÷ 1.05 = 16,000</td>
</tr>
<tr>
<td>19X3</td>
<td>21,280 ÷ 1.12 = 19,000</td>
</tr>
<tr>
<td>19X4</td>
<td>22,680 ÷ 1.26 = 18,000</td>
</tr>
<tr>
<td>19X5</td>
<td>23,970 ÷ 1.41 = 17,000</td>
</tr>
<tr>
<td>19X6</td>
<td>30,000 ÷ 1.50 = 20,000</td>
</tr>
</tbody>
</table>

The inventory by year would be computed as:
19X2  
Base year  
19X2 Increment $1,000 × 1.05  
$15,000 × 1.05  
$16,050

19X3  
Base year  
19X2 Increment  
19X3 Increment $3,000 × 1.12  
$15,000 + 1,050 + 3,360  
$19,410

19X4  
Base year  
19X2 Increment  
19X3 Increment after $1,000 of 19X3 layer is costed out $2,000 × 1.12  
$15,000 + 1,050 + 2,240  
$18,290

19X5  
Base year  
19X2 Increment  
19X3 Remaining $1,000 of 19X3 layer $1,000 × 1.12  
$15,000 + 1,050 + 1,120  
$17,170

19X6  
Base year  
19X2 Increment  
19X3 Increment  
19X6 Increment $3,000 × 1.50  
$15,000 + 1,050 + 1,120 + 4,500  
$21,670

What if you were given the inventory for 19X3, for example $21,280 and the 19X3 inventory in base year prices, but not the price index. You can construct your own index by dividing the base year inventory into the current year inventory.

\[
\frac{19X3 \text{ Inventory at X3 Prices} \, \$21,280}{19X3 \text{ Inventory at Base Prices} \, \$19,000} = 1.12
\]

5. Retail Method—An inventory method in which records are maintained at cost and retail. The method is used to maintain accountability and control of inventory assigned to retail units. Retail units are responsible for the retail price of goods on hand and goods shipped during the period, adjusted for price increases and decreases (markups and markdowns). The relationship of cost to retail is assumed to be the applicable ratio to apply to the ending inventory at retail to determine its cost. This is a valid assumption only if the relationship between cost and retail is relatively constant and that the mix of goods in the ending inventory is similar to that of goods included in the computation of the ratio. We can analyze the retail unit's responsibility in this way.

\[
\begin{align*}
\text{Cost} & \quad \text{Retail} \\
\text{Beginning inventory} & \quad X \quad X \\
+ \text{ Period shipments} & \quad X \quad X \\
+ \text{ Markups (price increases)} & \quad \_ \quad (X) \\
- \text{ Markdowns (price decreases)} & \quad (X) \quad \_ \\
\text{Total responsibility for period} & \quad X \quad X \\
- \text{ Sales (deposited to the credit of company)} & \quad (X) \quad \_ \\
- \text{ Employee discounts, sales discounts} & \quad (X) \quad \_ \\
\text{Book inventory at retail} & \quad X \quad X \\
\text{Physical inventory at retail} & \quad X \quad X \\
\text{Shrink} & \quad X \quad X
\end{align*}
\]
The retail units' book inventory under ideal conditions with no shrinkage, theft, spoilage or recording errors would be exactly the same as the physical at retail. The difference between the book inventory and the physical is called shrink or spoilage.

The retail inventory method may be applied on the basis of the Average, FIFO, and LIFO cost flow assumptions. The lower of cost or market method may also be used in conjunction with the retail method under these flow assumptions by excluding markdowns from the cost to retail ratio (refer to LIFO Method section regarding LIFO and L.C.M.)

**Terminology:**

- **Original Retail** — Price at which goods first offered for sale.
- **Additional Markups** — Additions that raise selling price above original retail.
- **Markdowns** — Deductions that lower price below original retail.
- **Markup Cancellations** — Deductions that do not decrease price below original retail.
- **Markdown Cancellations** — Additions that do not increase price above original retail.
- **Net Markups** — Additional markups minus markup cancellations.
- **Net Markdowns** — Markdowns minus markdown cancellations.

Net markdowns are not used to determine the cost ratio if the retail method is used to approximate cost or market, whichever is lower.

The following information will be used to illustrate the various retail methods.

The Grand Department Store, Inc., uses the retail-inventory method to estimate ending inventory for its monthly financial statements. The following data pertain to a single department for the month of October:

<table>
<thead>
<tr>
<th>Inventory, October 1:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>At cost</td>
<td>$17,000</td>
</tr>
<tr>
<td>At retail</td>
<td>30,000</td>
</tr>
<tr>
<td>Purchases (exclusive of freight and returns):</td>
<td></td>
</tr>
<tr>
<td>At cost</td>
<td>100,151</td>
</tr>
<tr>
<td>At retail</td>
<td>146,495</td>
</tr>
<tr>
<td>Freight-in</td>
<td>5,100</td>
</tr>
<tr>
<td>Purchase returns:</td>
<td></td>
</tr>
<tr>
<td>At cost</td>
<td>2,100</td>
</tr>
<tr>
<td>At retail</td>
<td>2,800</td>
</tr>
<tr>
<td>Additional markups</td>
<td>2,500</td>
</tr>
<tr>
<td>Markup cancellations</td>
<td>265</td>
</tr>
<tr>
<td>Markdowns (net)</td>
<td>5,000</td>
</tr>
<tr>
<td>Normal spoilage and breakage</td>
<td>3,000</td>
</tr>
<tr>
<td>Sales</td>
<td>132,930</td>
</tr>
</tbody>
</table>

- **Conventional Retail Method (Lower of Average Cost or Market)**

In conventional retail, markups are included as part of the cost ratio computation, but markdowns are excluded. This does not affect the computation of the ending inventory at retail, but does affect the cost ratio by reducing the percentage of cost to retail. The exclusion of markdowns in computing the ratio is a feature of conventional retail, its purpose being to approximate lower of cost or market. A more conservative inventory results.
Example:
Grand Department Stores, Inc.—Conventional Retail
(Lower of Average Cost or Market)

<table>
<thead>
<tr>
<th></th>
<th>At Cost</th>
<th>At Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory, October 1</td>
<td>$17,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>100,151</td>
<td>146,495</td>
</tr>
<tr>
<td>Freight-In</td>
<td>5,100</td>
<td>—</td>
</tr>
<tr>
<td>Purchase Returns</td>
<td>(2,100)</td>
<td>(2,800)</td>
</tr>
<tr>
<td>Additional Markups</td>
<td>—</td>
<td>2,500</td>
</tr>
<tr>
<td>Markup Cancellations</td>
<td>—</td>
<td>(265)</td>
</tr>
<tr>
<td>Available for sale</td>
<td>$120,151</td>
<td>175,930</td>
</tr>
<tr>
<td>Cost Ratio: $120,151 ÷ $175,930 = 68%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Markdowns (Net)</td>
<td>(5,000)</td>
<td></td>
</tr>
<tr>
<td>Normal spoilage and breakage</td>
<td>(3,000)</td>
<td></td>
</tr>
<tr>
<td>Sales (Net)</td>
<td>(132,930)</td>
<td></td>
</tr>
<tr>
<td>Inventory, October 31, at retail</td>
<td>$35,000</td>
<td></td>
</tr>
<tr>
<td>Inventory, October 31, at lower of average cost or market (estimated)</td>
<td>$23,800</td>
<td></td>
</tr>
</tbody>
</table>

- **Average Cost Retail Method:** For a retail cost method both net markups and net markdowns are included in the cost to retail ratio. This has the effect of reducing the retail value (denominator) and increasing the cost percentage.

Example:
Grand Department Stores, Inc.—Average Cost Retail

<table>
<thead>
<tr>
<th></th>
<th>At Cost</th>
<th>At Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory, October 1</td>
<td>$17,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>100,151</td>
<td>146,495</td>
</tr>
<tr>
<td>Freight-In</td>
<td>5,100</td>
<td>—</td>
</tr>
<tr>
<td>Purchase Returns</td>
<td>(2,100)</td>
<td>(2,800)</td>
</tr>
<tr>
<td>Additional Markups</td>
<td>2,500</td>
<td>—</td>
</tr>
<tr>
<td>Mark-up Cancellations</td>
<td>—</td>
<td>(265)</td>
</tr>
<tr>
<td>Net Markdowns</td>
<td>(5,000)</td>
<td></td>
</tr>
<tr>
<td>Cost Ratio: $120,151 ÷ $170,930 = 70%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal Spoilage and Breakage</td>
<td>(3,000)</td>
<td></td>
</tr>
<tr>
<td>Sales (Net)</td>
<td>(132,930)</td>
<td></td>
</tr>
<tr>
<td>Inventory, October 31 at Retail</td>
<td>$35,000</td>
<td></td>
</tr>
<tr>
<td>Inventory, October 31 at Average</td>
<td>$24,500</td>
<td></td>
</tr>
</tbody>
</table>

Note that ending inventory at retail ($35,000) is the same as under conventional retail. The retail method selected does **not** affect the retail value of the ending inventory.

- **FIFO Cost Retail Method:** To compute FIFO Cost Retail, the beginning inventory is excluded from the cost to retail ratio calculation. The cost ratio is then applied to the ending inventory at retail to obtain the cost of the ending inventory.
#### Example:

**Grand Department Stores, Inc.—FIFO Cost Retail**

<table>
<thead>
<tr>
<th></th>
<th>At Cost</th>
<th>At Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory, October 1</td>
<td>$17,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>$100,151</td>
<td>$146,495</td>
</tr>
<tr>
<td>Freight-In</td>
<td>5,100</td>
<td>—</td>
</tr>
<tr>
<td>Purchase Returns</td>
<td>(2,100)</td>
<td>(2,800)</td>
</tr>
<tr>
<td>Additional Markups</td>
<td>—</td>
<td>2,500</td>
</tr>
<tr>
<td>Markup Cancellations</td>
<td>—</td>
<td>(265)</td>
</tr>
<tr>
<td>Net Markdowns</td>
<td></td>
<td>(5,000)</td>
</tr>
<tr>
<td><strong>Current Period Inventory</strong></td>
<td><strong>$103,151</strong></td>
<td><strong>$140,930</strong></td>
</tr>
<tr>
<td>Cost Ratio: $103,151 ÷ $140,930 = 73%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Available</td>
<td>170,930</td>
<td></td>
</tr>
<tr>
<td>Normal Spoilage and Breakage</td>
<td>(3,000)</td>
<td></td>
</tr>
<tr>
<td>Sales (Net)</td>
<td>(132,930)</td>
<td></td>
</tr>
<tr>
<td>Inventory, October 31 at retail</td>
<td>$35,000</td>
<td></td>
</tr>
<tr>
<td>Inventory, October 31, at FIFO</td>
<td>$25,550</td>
<td></td>
</tr>
</tbody>
</table>

Note the following:
1. Net Markdowns and Markups are assumed to apply only to the current period's inventory.
2. The Ending Inventory at retail is the same as it was for the Average Cost Methods ($35,000).
3. The Ending Inventory at cost has been valued at the current period's cost ratio (FIFO flow).
4. Although beginning inventory is excluded from the ratio, it must be used to compute the ending inventory at retail.

- **Lower of FIFO Cost or Market Retail Method.** The lower of FIFO cost or market is computed the same way as FIFO cost except net markdowns would be excluded from the cost rates.

#### Example:

**Grand Department Stores, Inc.—Lower of FIFO Cost or Market Retail**

Referring to the Retail FIFO Cost Computation, the cost ratio would be computed as follows:

\[
\text{Cost ratio} = \frac{\text{Current period cost}}{\text{Current period retail before net markdowns}} = \frac{103,151}{140,930 + 5,000} = 71\%
\]

Inventory at October 31, Lower of FIFO Cost or Market

$35,000 × 71% = $24,850

- **LIFO Cost Retail Method:** As in other LIFO methods, retail LIFO consists of a base and layers. To compute LIFO cost retail, the beginning inventory is excluded from the cost to retail ratio calculation (as it was for FIFO). Remember, however, that the beginning inventory must be used to compute the ending inventory at retail. In LIFO retail the ending inventory at retail is compared with the beginning inventory at retail to determine if a layer has been added. If there is an increase, a LIFO layer is established and the current period cost ratio is applied only to that layer to determine its cost. The cost of the layer is then added to the cost of the beginning inventory to determine the cost of the ending inventory. If there is a decrease in ending inventory, the current period ratio is not applicable since there is no LIFO layer. The decrease is included in cost of goods sold on a LIFO basis, in that the latest layer formed is eliminated first.
Example:

Grand Department Stores, Inc.—LIFO Cost Retail

<table>
<thead>
<tr>
<th>At Cost</th>
<th>At Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory, October 1</td>
<td>$17,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>$100,151</td>
</tr>
<tr>
<td>Freight-In</td>
<td>5,100</td>
</tr>
<tr>
<td>Purchase Returns</td>
<td>(2,100)</td>
</tr>
<tr>
<td>Additional markups</td>
<td>—</td>
</tr>
<tr>
<td>Markup cancellations</td>
<td>(265)</td>
</tr>
<tr>
<td>Net Markdowns</td>
<td>(5,000)</td>
</tr>
<tr>
<td>Current period inventories</td>
<td>$103,151</td>
</tr>
<tr>
<td>Cost ratio: $103,151 ÷ $140,930 = 73%</td>
<td></td>
</tr>
<tr>
<td>Total available</td>
<td>170,930</td>
</tr>
<tr>
<td>Normal spoilage and breakage</td>
<td>(3,000)</td>
</tr>
<tr>
<td>Sales (net)</td>
<td>(132,930)</td>
</tr>
<tr>
<td>Inventory October 31 at retail</td>
<td>$35,000</td>
</tr>
</tbody>
</table>

Inventory October 31 at LIFO Cost
- Beginning inventory $17,000
- Layer $5,000 × 73% $3,650
- $20,650

Note the following:
1) The ending inventory at retail is the same as it was under the other retail methods.
2) The current year cost to retail ratio is applied only to the increase in inventory at retail.
3) Similarity of set up with FIFO Cost Retail

- **Lower of LIFO Cost or Market Retail:** The lower of LIFO cost or market retail is computed the same as LIFO cost except net markdowns would be excluded from the cost ratio computation. (Refer to the section on LIFO method regarding application of L.C.M. with LIFO Cost).

Example:

Grand Department Stores, Inc.—Lower of LIFO Cost or Market Retail

Referring to the Retail LIFO cost computation, the cost ratio would be computed as follows:

\[
\text{Cost ratio} = \frac{\text{Current period cost}}{\text{Current period retail before net markdowns}} = \frac{103,151}{140,930 + 5,000} = 71\%
\]

Inventory @ October 31, Lower of LIFO Cost or Market
- Base $17,000
- Layer $5,000 × 71% $3,550
- $20,550

**Dollar Value LIFO Retail.** Dollar Value is similar to LIFO retail except that the inventory layers contain an additional dimension; that is, the effect of changes in price levels. Inventory increase at retail can only be determined by converting current year inventory to base year prices. Inventory layers are then computed similar to LIFO retail except that price of the current year is used, such as: (Inventory at retail) × (cost/retail) × (price index).

**Determination of Price Level Index in Dollar Value LIFO Retail**—The price level index specifically relates to the inventory and is not a measure of general price levels as in price level accounting (sometimes called "replacement cost" accounting). The price index may be one internally generated or if a government index is available for the particular inventory, it may be used. The index must be suitable to convert the ending inventory to base year or at least previous year prices to determine if inventory quantities have increased.
Illustration of Dollar Value LIFO Retail

Procedure to be followed:
1. Compute the ending inventory at retail.
2. Restate the current year inventory in terms of base year prices. Divide the inventory into the base and layers to determine whether there is an increase in quantities.
3. Convert the base and layers into inventory price levels by use of the index and the cost to retail ratio.

Facts:
The James Company switched to dollar value LIFO retail on December 31, 19X1, at which time the inventory, using the dollar value LIFO retail inventory method, at retail was $166,000 and the cost/retail ratio was 76%. Inventory data for subsequent years are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Inventory at Respective Year-end Retail Prices</th>
<th>Price Index (Base Year 19X1)</th>
<th>Cost/Retail Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>19X2</td>
<td>$186,560</td>
<td>106</td>
<td>72%</td>
</tr>
<tr>
<td>19X3</td>
<td>198,000</td>
<td>110</td>
<td>75%</td>
</tr>
<tr>
<td>19X4</td>
<td>218,500</td>
<td>115</td>
<td>78%</td>
</tr>
<tr>
<td>19X5</td>
<td>231,250</td>
<td>125</td>
<td>74%</td>
</tr>
<tr>
<td>19X6</td>
<td>264,000</td>
<td>132</td>
<td>73%</td>
</tr>
</tbody>
</table>

Computation of Inventories by Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Inventory</th>
<th>Ratio</th>
<th>Index</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>$166,000</td>
<td>76%</td>
<td>100</td>
<td>$126,160</td>
</tr>
<tr>
<td>19X2 Layer (1)</td>
<td>10,000</td>
<td>72%</td>
<td>106</td>
<td>7,632</td>
</tr>
<tr>
<td>19X3 Layer (2)</td>
<td>4,000</td>
<td>75%</td>
<td>110</td>
<td>3,300</td>
</tr>
<tr>
<td>19X4 Layer (3)</td>
<td>10,000</td>
<td>78%</td>
<td>115</td>
<td>8,970</td>
</tr>
<tr>
<td>19X5 Layer (4)</td>
<td>(5,000)</td>
<td>78%</td>
<td>115</td>
<td>(4,485)</td>
</tr>
<tr>
<td>19X6 Layer (5)</td>
<td>15,000</td>
<td>73%</td>
<td>132</td>
<td>14,454</td>
</tr>
</tbody>
</table>

Inventory at 12/31/X6 at cost $156,031

(1) $186,560 ÷ 1.06 = $176,000 – $166,000 = $10,000
(2) $198,000 ÷ 1.10 = $180,000 – $176,000 = $4,000
(3) $218,500 ÷ 1.15 = $190,000 – $180,000 = $10,000
(4) $231,250 ÷ 1.25 = $185,000 – $190,000 = (5,000) decrease
Results in reduction of 19X4 layer—19X5 cost/retail ratio not applicable
(5) $264,000 ÷ 1.32 = $200,000 – $185,000 = $15,000

Illustrative Problem: Under your guidance as of January 1, 19X5, the Penny Wise Discount Store installed the retail method of accounting for its merchandise inventory. When you undertook the preparation of the store's financial statements at June 30, 19X5, the following data were available:

<table>
<thead>
<tr>
<th>Selling</th>
<th>Cost</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory, January 1</td>
<td>$26,900</td>
<td>$40,000</td>
</tr>
<tr>
<td>Markdowns</td>
<td></td>
<td>10,500</td>
</tr>
<tr>
<td>Markups</td>
<td></td>
<td>19,500</td>
</tr>
<tr>
<td>Markdown cancellations</td>
<td></td>
<td>6,500</td>
</tr>
<tr>
<td>Markup cancellations</td>
<td></td>
<td>4,500</td>
</tr>
<tr>
<td>Purchases</td>
<td>86,200</td>
<td>111,800</td>
</tr>
<tr>
<td>Sales</td>
<td></td>
<td>122,000</td>
</tr>
<tr>
<td>Purchase returns and allowances</td>
<td>1,500</td>
<td>1,800</td>
</tr>
<tr>
<td>Sales returns and allowances</td>
<td></td>
<td>6,000</td>
</tr>
</tbody>
</table>
**Required:**

a. Prepare a schedule to compute the Penny Wise Discount Store's June 30, 19X5, inventory under the retail method of accounting for inventories. The inventory is to be valued at cost under the LIFO method.

b. Without prejudice to your solution to part (a), assume that you computed the June 30, 19X5, inventory to be $44,100 at retail and the ratio of cost to retail to be 80%. The general price level has increased from 100 at January 1, 19X5, to 105 at June 30, 19X5.

Prepare a schedule to compute the June 30, 19X5, inventory at the June 30 price level under the dollar-value LIFO method.

**Solution**—Penny Wise Discount Store

a.  

**COMPUTATION OF INVENTORY AT LIFO COST UNDER THE RETAIL INVENTORY METHOD**  
June 30, 19X5

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory, January 1</td>
<td>$26,900</td>
<td>$40,000</td>
</tr>
<tr>
<td>Add: Purchases</td>
<td>86,200</td>
<td>111,800</td>
</tr>
<tr>
<td>Less purchase returns and allowances</td>
<td>(1,500)</td>
<td>(1,800)</td>
</tr>
<tr>
<td>Markups</td>
<td>19,500</td>
<td></td>
</tr>
<tr>
<td>Less markup cancellations</td>
<td>_______</td>
<td>(4,500)</td>
</tr>
<tr>
<td>Goods available for sale</td>
<td>$111,600</td>
<td>$165,000</td>
</tr>
<tr>
<td>Less: Sales at retail</td>
<td>$122,000</td>
<td></td>
</tr>
<tr>
<td>Sales returns and allowances</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td>Net sales</td>
<td>116,000</td>
<td></td>
</tr>
<tr>
<td>Markdowns</td>
<td>$10,500</td>
<td></td>
</tr>
<tr>
<td>Less markdown cancellations</td>
<td>6,500</td>
<td>4,000</td>
</tr>
<tr>
<td>Ending inventory at retail</td>
<td>$45,000</td>
<td></td>
</tr>
<tr>
<td>Inventory, January 1</td>
<td>$26,900</td>
<td></td>
</tr>
<tr>
<td>Add LIFO Layer: [70% of ($45,000 – $40,000)]</td>
<td>3,500</td>
<td></td>
</tr>
<tr>
<td>Inventory, June 30, at LIFO</td>
<td>$30,400</td>
<td></td>
</tr>
</tbody>
</table>

b.  

**COMPUTATION OF INVENTORY UNDER THE DOLLAR-VALUE LIFO COST METHOD**  
June 30, 19X5

Ending inventory at retail at January 1 price level (44,100 ÷ 1.05) $42,000
Less beginning inventory at retail 40,000
Inventory increment at retail, January 1 price level $ 2,000

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory increment at retail, June 30 price level ($2,000 × 1.05)</td>
<td>$ 2,100</td>
</tr>
<tr>
<td>Beginning inventory at cost</td>
<td>26,900</td>
</tr>
<tr>
<td>Inventory increment at cost at June 30 price level ($2,100 × .80)</td>
<td>1,680</td>
</tr>
<tr>
<td>Ending inventory at dollar-value LIFO cost</td>
<td>$28,580</td>
</tr>
</tbody>
</table>
LOWER OF COST OR MARKET

ASC 330 states that, "A departure from the cost basis of pricing the inventory is required when the utility of the goods is no longer as great as its cost. Where there is evidence that the utility of goods, in their disposal in the ordinary course of business, will be less than cost . . . the difference should be recognized as a loss of the current period. This is generally accomplished by stating such goods at a lower level commonly designated as market."

As used in the phrase "lower of cost or market", the term market means **current replacement cost** except that:

1. Market should not exceed the net realizable value (NRV) which is the selling price in the ordinary course of business less reasonably predictable costs of completion and disposal, and
2. Market should not be less than NRV reduced by an allowance for an approximately normal profit margin.

For example, assume a selling price of $1.

<table>
<thead>
<tr>
<th>Selling price</th>
<th>$1.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of completion and disposal</td>
<td>.15</td>
</tr>
<tr>
<td>NRV—Upper limit</td>
<td>.85</td>
</tr>
<tr>
<td>Normal profit margin 20%</td>
<td>.20</td>
</tr>
<tr>
<td>Lower limit</td>
<td>$.65</td>
</tr>
</tbody>
</table>

This means that market cannot be greater than $.85, the upper limit, nor lower than $.65, the lower limit. Therefore, in determining LC/M compare replacement cost with the upper and lower limit, and

- a. If the replacement cost falls between the upper and lower limit, use replacement cost as market.
- b. If the replacement cost exceeds the upper limit, use upper limit as market.
- c. If lower than the lower limit, use the lower limit.

Then compare market as determined above with cost to determine the inventory value. The lower of cost or market rules resulted from balance sheet conservatism and were modified by the upper and lower limit rules to assure that inventory losses will be taken in the current period and that excessive inventory writedowns cannot be taken which could result in increasing income in the next period. Consider as follows:

- a. The upper limit will not allow the inventory item or group to be carried at more than selling price less the cost of completion and disposal. This forces losses into the current period.
- b. The lower limit provides a floor that prevents the inventory item from generating a greater than normal profit margin in the next period.

The LC/M rules can be applied to inventory

- a. item by item, or
- b. components of each major category, or
- c. the total inventory.

The basis of stating inventories should be consistently applied and since there are acceptable alternative methods, should be disclosed. An example of the application of the LC/M rules is as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Original</th>
<th>Replacement</th>
<th>Selling Price</th>
<th>Cost to Complete and Sell</th>
<th>Normal Profit Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$1.18</td>
<td>$1.27</td>
<td>$1.40</td>
<td>.13</td>
<td>.20</td>
</tr>
<tr>
<td>2</td>
<td>.69</td>
<td>.72</td>
<td>.98</td>
<td>.14</td>
<td>.30</td>
</tr>
<tr>
<td>3</td>
<td>1.90</td>
<td>1.62</td>
<td>2.40</td>
<td>.30</td>
<td>.40</td>
</tr>
<tr>
<td>4</td>
<td>.27</td>
<td>.25</td>
<td>.40</td>
<td>.06</td>
<td>.12</td>
</tr>
<tr>
<td>5</td>
<td>.90</td>
<td>.96</td>
<td>1.10</td>
<td>.22</td>
<td>.25</td>
</tr>
</tbody>
</table>

Determine the LC/M for the above items.
### Solution:

<table>
<thead>
<tr>
<th>Item</th>
<th>Upper Limit</th>
<th>Lower Limit</th>
<th>Market Limit</th>
<th>Cost</th>
<th>LCM/M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.27</td>
<td>1.07</td>
<td>1.27</td>
<td>1.18</td>
<td>1.18</td>
</tr>
<tr>
<td>2</td>
<td>.84</td>
<td>.54</td>
<td>.72</td>
<td>.69</td>
<td>.69</td>
</tr>
<tr>
<td>3</td>
<td>2.10</td>
<td>1.70</td>
<td>1.70</td>
<td>1.90</td>
<td>1.70</td>
</tr>
<tr>
<td>4</td>
<td>.36</td>
<td>.24</td>
<td>.25</td>
<td>.27</td>
<td>.25</td>
</tr>
<tr>
<td>5</td>
<td>.88</td>
<td>.63</td>
<td>.88</td>
<td>.90</td>
<td>.88</td>
</tr>
</tbody>
</table>

### STATEMENT OF INVENTORIES ABOVE COST

Only in exceptional cases may inventories be stated above cost. Items, such as precious metals, agricultural, mineral and other products, which are interchangeable and have an immediate marketability may justifiably be stated above cost. Where inventories are stated at sales prices, they should be reduced by expenses to be incurred in disposal.

### TREATMENT OF INVENTORY LOSSES

Accrued net losses on firm purchase commitments for goods for inventory are measured in the same way as are inventory losses, and should, if material, be recognized in the accounts and the amounts thereof separately disclosed in the income statement (Statement 10, Inventory Pricing).

1. Illustration of Statement #10—Accrued net losses on firm purchase commitments for goods. On September 1, a purchase commitment is entered into for $40,000. On December 31 of the same year the current market price of such commitment is $25,000. The shipment arrives during January of the following year:

   Entry 12/31: Loss on purchase commitments 15,000
   Est. liability on purchase commitments 15,000

   Entry 1/21: Purchases 25,000
   Est. liability on purchase commitments 15,000
   Accounts payable 40,000

2. Assume that title to goods passed on September 1, 19X7, and delivery will not be made until February 1, 19X8.

   9/1/X7: Purchases 40,000 (CGS)
   Accounts payable 40,000

   12/31/X7: Loss on purchase commitment 15,000
   Inventory 15,000

or no entry is necessary if the item is valued at lower of cost or market in the ending inventory.

**General Rule:** Statement 10 (consistent with FASB #5 re. contingencies) permits taking inventory losses on firm purchase commitments in the period of loss. However, inventory losses should not be anticipated, whereby one accounting period is charged with inventory losses anticipated in a subsequent accounting period. If a reserve for inventory losses is set up, it represents only an appropriation of retained earnings, and in no way should be used to absorb actual losses.
CONSIGNMENTS

As part of their marketing activities, some companies consign goods to others. In such cases, the consignor ships goods to the consignee who acts as an agent of the consignor and receives a commission when the goods are sold. It is, of course, the consignee's responsibility to remit payment for the goods sold on a periodic basis.

The consigned goods, therefore, are a part of the consignor's inventory until sold. Conversely, goods on consignment are not included in the consignee's inventory even though in the consignee's possession.

Goods should be included in inventory at purchase price or cost of production plus cost of shipping to the consignee. Usually, the shipping costs must be allocated to goods sold and unsold.

DEPLETION

Unit of Production Method (Accounting Method)

\[
\text{Cost or value assigned to asset} = \frac{\text{Cost}}{\text{Number of recoverable units}}
\]

Example: Assume that $150,000 is paid for mining property estimated to contain 500,000 tons of ore. The unit depletion charge would be $.30.

Depletion, as well as amortization of drilling and development, applicable to units not sold should be included in inventory. Consequently, depletion expense will apply only to units sold. Depletion cost, however, applies to all units extracted.

Percentage Depletion (Income Tax Method, not acceptable for accounting purposes)

\[
\text{Gross income} \times \text{depletion percentage}
\]

Limitation: Depletion expense cannot exceed 50% of the taxable income from the property without the allowance for depletion.

Percentage depletion can be deducted without regard to cost of the property.

Cost Depletion Accounting

For accounting purposes (unit production method) depletion rates are adjusted as it becomes apparent that the recoverable deposit or growth is more or less than previously estimated.

The periodic depletion charge is credited to the Allowance for Depletion account. Assume that depletion cost for ore mined is $50,000, beginning inventory is $10,000 and ending inventory is $15,000.

\[
\begin{align*}
\text{Depletion Cost (cost of goods produced)} & = 50,000 \\
\text{Allowance for Depletion} & = 50,000 \\
\end{align*}
\]

To record depletion based on ore mined.

At year end when the ending inventory has been determined:

\[
\begin{align*}
\text{Ending Inventory} & = 15,000 \\
\text{Beginning Inventory} & = 10,000 \\
\text{Depletion Cost} & = 5,000 \\
\end{align*}
\]

To compute cost of goods sold: $50,000 – $5,000 = $45,000
Illustrative Problem:

Cost of land $200,000
Development cost 150,000
Estimated tonnage 1,750,000

In the first year of operation 100,000 tons were sold for $3.00 a ton. Mining costs were $150,000 and administrative expenses were $75,000, and 125,000 tons were extracted. Prepare an income statement and compute the value of the ending inventory.

Solution:

Sales 100,000 \times $3.00 = $300,000

Cost of Goods Sold:
- Depletion 100,000 \times $0.20 = $20,000
- Extraction 100,000 \times $1.20 = 120,000
  Gross Profit $140,000

Expenses $75,000

Net Income $75,000

\[
\begin{align*}
350,000 &= $0.20 \text{ depletion cost} \\
1,750,000 &= 1.40 \times 25,000 = $35,000
\end{align*}
\]

IFRS - INVENTORIES

LIFO

The most publicized difference between IFRS and US GAAP is that IFRS#2 does not allow the use of the LIFO method for inventory valuation. This is logical because IFRS is a balance sheet oriented set of standards. FIFO, weighted average and specific identification (especially FIFO) are balance sheet concepts. IFRS also adopted a "physical flow" concept for recognizing the cost of inventories sold.

FAIR VALUE

There has been much discussion implying that IFRS financial statements report all assets at fair. Fair Value it is not an acceptable concept for inventory reporting under IFRS.

LOWER OF COST OR MARKET

Another difference is that IFRS defines "market" as net realizable value (ceiling). Remember that net realizable value is defined as sales price minus the cost to complete and sell. Under IFRS LCM is calculated by comparing the historical cost to the net realizable value. For example, assume the following data related to one unit of inventory:

\[
\begin{align*}
\text{Cost} &= $6.00 \\
\text{Replacement cost (Market)} &= $4.25 \\
\text{Net Realizable Value (ceiling)} &= $4.50 \\
\text{NRV less a normal profit (Flows)} &= $4.00
\end{align*}
\]

Under IFRS, the cost of $6.00 is compared to the net realizable value of $4.50 and the lower of cost or market is $4.50. A loss of $1.50 on inventory valuation is recognized on the income statement and an inventory valuation allowance is credited on the balance sheet. Note that the replacement cost and the floor which are USGAAP terms are not used in the calculation.
RESTORATION OF LOSS

Under US GAAP once the inventory is written down to $4.50 and the $1.50 loss is recognized, the inventory cannot be written back up to the original cost if the inventory recovers its value. The US justification for this process is conservatism. IFRS takes the opposite view and will allow the inventory to be restored to its original cost. Assume the following changes to our example in a subsequent period:

Inventory "cost" $4.50
Net realizable value $6.25

Under IFRS the inventory could be restored to its original cost.

The journal entry would be to debit the inventory valuation allowance on the balance sheet and credit the recovery (gain) in value of inventory for $1.50 on the income statement. Note that IFRS does not allow the inventory to be increased to $6.25 which would be above cost.

BIOLOGICAL ASSETS

Biological assets which include agricultural inventories are an exception to the IFRS lower of cost or market procedures. Biological inventories are reported at fair value less cost to sell at the point of harvest.

TERMINOLOGY

Under IFRS inventories may be reported on the balance sheet as "inventories" or stocks.

INTERIM FINANCIAL STATEMENTS

In US GAAP an estimated LCM Loss in an interim period may be postponed if it is the judgment of the management that the LCM loss will be recovered in a future interim period within the year. This logic is why should a company recognize a loss in an interim period and have that loss reversed in a future period as a gain. Under IFRS this "judgment" approach is not allowed and the loss must be recognized in the interim period in which it occurs.

INTEREST CAPITALIZED ON INVENTORY

Under US GAAP the capitalization of interest is prohibited on the routine repetitive production of inventories. IFRS generally agrees with US GAAP but makes an exception to allow interest to be capitalized on inventories that require a lengthy period to prepare for sale.

Fast Track Summary
Of differences between
US GAAP and IFRS on Inventory

<table>
<thead>
<tr>
<th>Topic</th>
<th>IFRS</th>
<th>US GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory Cost Methods</td>
<td>Specific Identification</td>
<td>Specific Identification</td>
</tr>
<tr>
<td></td>
<td>FIFO or Weighted Average</td>
<td>FIFO, Weighted Average</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LIFO</td>
</tr>
<tr>
<td>Lower of cost or market</td>
<td>Cost vs. Net Realizable Value (Market)</td>
<td>Cost vs Replacement Cost (Market), Ceiling, Floor</td>
</tr>
</tbody>
</table>

3-18
<table>
<thead>
<tr>
<th>Restoration of LCM Loss to cost</th>
<th>Acceptable</th>
<th>Not Acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory reported at Fair Value</td>
<td>Not Acceptable</td>
<td>Not Acceptable</td>
</tr>
<tr>
<td>LCM on Biological (agricultural) inventory</td>
<td>Reported at Sales Value - Cost to sell at the point of Harvest</td>
<td>Normal LCM</td>
</tr>
<tr>
<td>Terminology</td>
<td>Inventories</td>
<td>Stocks</td>
</tr>
<tr>
<td>Interest capitalized on On production inventory</td>
<td>Not on routine production</td>
<td>Not on routine production</td>
</tr>
<tr>
<td></td>
<td>Allowed on production that requires a lengthy period to produce</td>
<td></td>
</tr>
</tbody>
</table>
Chapter Three
Inventories Questions

1. When using the periodic-inventory method, which of the following generally would **not** be separately accounted for in the computation of cost of goods sold?
   a. Trade discounts applicable to purchases during the period.
   b. Cash (purchase) discounts taken during the period.
   c. Purchase returns and allowances of merchandise during the period.
   d. Cost of transportation-in for merchandise purchased during the period.

   **Items 4 and 5** are based on the following:

   During January 1993, Metro Co., which maintains a perpetual inventory system, recorded the following information pertaining to its inventory:

<table>
<thead>
<tr>
<th>Units</th>
<th>Unit cost</th>
<th>Total cost on hand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance on 1/1/93</td>
<td>1,000</td>
<td>$1</td>
</tr>
<tr>
<td>Purchased on 1/7/93</td>
<td>600</td>
<td>3</td>
</tr>
<tr>
<td>Sold on 1/20/93</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>Purchased on 1/25/93</td>
<td>400</td>
<td>5</td>
</tr>
</tbody>
</table>

2. The following information was derived from the 1989 accounting records of Clem Co.:

<table>
<thead>
<tr>
<th></th>
<th>Clem's central warehouse</th>
<th>Clem's goods held by consignees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>$110,000</td>
<td>$12,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>480,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Freight in</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Transportation to consignees</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>Freight out</td>
<td>30,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Ending inventory</td>
<td>145,000</td>
<td>20,000</td>
</tr>
</tbody>
</table>

Clem’s 1989 cost of sales was
a. $455,000
b. $485,000
c. $507,000
d. $512,000

3. The following items were included in Opal Co.’s inventory account at December 31, 1992:

   Merchandise out on consignment, at sales price, including 40% markup on selling price $40,000
   Goods purchased, in transit, shipped f.o.b. shipping point 36,000
   Goods held on consignment by Opal 27,000

By what amount should Opal’s inventory account at December 31, 1992, be reduced?
   a. $103,000
   b. $67,000
c. $51,000
d. $43,000

4. Under the moving-average method, what amount should Metro report as inventory at January 31, 1993?
   a. $2,640
   b. $3,225
c. $3,300
d. $3,900

5. Under the LIFO method, what amount should Metro report as inventory at January 31, 1993?
   a. $1,300
   b. $2,700
c. $3,900
d. $4,100

6. During periods of rising prices, when the FIFO inventory method is used, a perpetual inventory system results in an ending inventory cost that is
   a. The same as in a periodic inventory system.
   b. Higher than in a periodic inventory system.
c. Lower than in a periodic inventory system.
d. Higher or lower than in a periodic inventory system, depending on whether physical quantities have increased or decreased.
7. On June 1, 1989, Pitt Corp. sold merchandise with a list price of $5,000 to Burr on account. Pitt allowed trade discounts of 30% and 20%. Credit terms were 2/15, n/40 and the sale was made FOB shipping point. Pitt prepaid $200 of delivery costs for Burr as an accommodation. On June 12, 1989, Pitt received from Burr a remittance in full payment amounting to
a. $2,744
b. $2,940
c. $2,944
d. $3,140

8. A company decided to change its inventory valuation method from FIFO to LIFO in a period of rising prices. What was the result of the change on ending inventory and net income in the year of the change?

<table>
<thead>
<tr>
<th>Ending inventory</th>
<th>Net income</th>
</tr>
</thead>
</table>
a. Increase       | Increase   |
b. Increase       | Decrease   |
c. Decrease       | Decrease   |
d. Decrease       | Increase   |

9. A company records inventory at the gross invoice price. Theoretically, how should the following affect the costs in inventory?

<table>
<thead>
<tr>
<th>Warehousing costs</th>
<th>Cash discounts available</th>
</tr>
</thead>
</table>
a. Increase         | Decrease                 |
b. No effect         | Decrease                 |
c. No effect         | No effect                |
d. Increase         | No effect                |

10. The acquisition cost of a heavily used raw material changes frequently. The book value of the inventory of this material at year-end will be the same if perpetual records are kept as it would be under a periodic inventory method only if the book value is computed under the
a. Weighted-average method.
b. First-in, first-out method.
c. Last-in, first-out method.
d. Base-stock method.

11. Kahn Co., in applying the lower of cost or market method, reports its inventory at replacement cost. Which of the following statements are correct?

<table>
<thead>
<tr>
<th>The net realizable value, less a normal profit margin, is greater than replacement cost</th>
</tr>
</thead>
</table>
a. Yes                                        |
b. Yes                                        |
c. No                                         |
d. Yes                                        |

12. On May 2, a fire destroyed the entire merchandise inventory on hand of Sanchez Wholesale Corporation. The following information is available:

Sales, Jan. 1 through May 2: $360,000
Inventory, January 1: $80,000
Merchandise purchases, January 1 through May 2 (including $40,000 of goods in transit on May 2, shipped F.O.B. shipping point): $330,000
Markup percentage on cost: 20%

What is the estimated inventory on May 2 immediately prior to the fire?

a. $70,000.
b. $82,000.
c. $110,000.
d. $122,000.

13. A company using a periodic inventory system neglected to record a purchase of merchandise on account at year end. This merchandise was omitted from the year-end physical count. How will these errors affect assets, liabilities, and stockholders' equity at year end and net earnings for the year?

<table>
<thead>
<tr>
<th>Stockholders' Equity</th>
<th>Net Earnings</th>
</tr>
</thead>
</table>
a. No effect          | overstate    |
b. No effect          | understate   |
c. Understate         | understate   |
d. Understate         | no effect    |

3Q-2
14. Jamison Corporation's inventory cost on its statement of financial position was lower using first-in, first-out than last-in, first-out. Assuming no beginning inventory, what direction did the cost of purchases move during the period?
   b. Down.
   c. Steady.
   d. Cannot be determined.

15. Moore Corporation has two products in its ending inventory, each accounted for at the lower of cost or market. A profit margin of 30% on selling price is considered normal for each product. Specific data with respect to each product follows:

<table>
<thead>
<tr>
<th>Product</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>#2</td>
</tr>
<tr>
<td>Historical cost</td>
<td>$17.00</td>
</tr>
<tr>
<td>Replacement cost</td>
<td>15.00</td>
</tr>
<tr>
<td>Estimated cost to dispose</td>
<td>5.00</td>
</tr>
<tr>
<td>Estimated selling price</td>
<td>30.00</td>
</tr>
</tbody>
</table>

In pricing its ending inventory using the lower of cost or market, what unit values should Moore use for products #1 and #2 respectively?
   a. $15.00 and $44.00.
   b. $16.00 and $44.00.
   c. $16.00 and $45.00.
   d. $17.00 and $46.00.

16. Bren Co.’s beginning inventory at January 1, 1993, was understated by $26,000, and its ending inventory was overstated by $52,000. As a result, Bren's cost of goods sold for 1993 was
   a. Understated by $26,000.
   b. Overstated by $26,000.
   c. Understated by $78,000.
   d. Overstated by $78,000.

17. Ashe Co. recorded the following data pertaining to raw material X during January 1990:

<table>
<thead>
<tr>
<th>Date</th>
<th>Received</th>
<th>Cost</th>
<th>Issued</th>
<th>On hand</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/90</td>
<td>Inventory</td>
<td>$8.00</td>
<td>3,200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Issue</td>
<td>1,600</td>
<td>1,600</td>
<td></td>
</tr>
<tr>
<td>1/22/90</td>
<td>Purchase</td>
<td>4,800</td>
<td>$9.60</td>
<td>6,400</td>
</tr>
</tbody>
</table>

The moving-average unit cost of X inventory at January 31, 1990, is
   a. $8.80
   b. $8.96
   c. $9.20
   d. $9.60

18. The retail inventory method includes which of the following in the calculation of both cost and retail amounts of goods available for sale?
   a. Purchase returns.
   b. Sales returns.
   c. Net markups.
   d. Freight in.

19. The Gunther Company acquired a tract of land containing an extractable natural resource. Gunther is required by its purchase contract to restore the land to a condition suitable for recreational use after it has extracted the natural resource. Geological surveys estimate that the recoverable reserves will be 4,000,000 tons, and that the land will have a value of $1,000,000 after restoration. Relevant cost information follows:

<table>
<thead>
<tr>
<th></th>
<th>Land</th>
<th>Estimated restoration costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical cost</td>
<td>$17.00</td>
<td>$ 45.00</td>
</tr>
<tr>
<td>Replacement cost</td>
<td>15.00</td>
<td>46.00</td>
</tr>
<tr>
<td>Estimated cost to dispose</td>
<td>5.00</td>
<td>26.00</td>
</tr>
<tr>
<td>Estimated selling price</td>
<td>30.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

If Gunther maintains no inventories of extracted material, what should be the charge to depletion expense per ton of extracted material?
   a. $2.00.
   b. $2.25.
   c. $2.30.
   d. $2.55.

20. Thread Co. is selecting its inventory system in preparation for its first year of operations. Thread intends to use either the periodic weighted average method or the perpetual moving average method, and to apply the lower of cost or market rule either to individual items or to the total inventory. Inventory prices are expected to generally increase throughout 1991, although a few individual prices will decrease. What inventory system should Thread select if it wants to maximize the inventory carrying amount at December 31, 1991?
21. Assuming no beginning inventory, what can be said about the trend of inventory prices if cost of goods sold computed when inventory is valued using the FIFO method exceeds cost of goods sold when inventory is valued using the LIFO method?
   a. Prices decreased.
   b. Prices remained unchanged.
   c. Prices increased.
   d. Price trend cannot be determined from information given.

22. On December 1, 1992, Alt Department Store received 505 sweaters on consignment from Todd. Todd’s cost for the sweaters was $80 each, and they were priced to sell at $100. Alt’s commission on consigned goods is 10%. At December 31, 1992, 5 sweaters remained. In its December 31, 1992, balance sheet, what amount should Alt report as payable for consigned goods?
   a. $49,000
   b. $45,400
   c. $45,000
   d. $40,400

23. Anders Co. uses the moving-average method to determine the cost of its inventory. During January 1992, Anders recorded the following information pertaining to its inventory:

<table>
<thead>
<tr>
<th>Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance on 1/1/92</td>
<td>40,000</td>
</tr>
<tr>
<td>Sold on 1/17/92</td>
<td>35,000</td>
</tr>
<tr>
<td>Purchased on 1/28/92</td>
<td>20,000</td>
</tr>
</tbody>
</table>

   What amount of inventory should Anders report in its January 31, 1992, balance sheet?
   a. $200,000
   b. $185,000
   c. $162,500
   d. $150,000

24. Hutch, Inc., uses the conventional retail inventory method to account for inventory. The following information relates to 1991 operations:

<p>| Average |</p>
<table>
<thead>
<tr>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory and purchases</td>
<td>$600,000</td>
</tr>
<tr>
<td>Net markups</td>
<td>40,000</td>
</tr>
<tr>
<td>Net markdowns</td>
<td>60,000</td>
</tr>
<tr>
<td>Sales</td>
<td>780,000</td>
</tr>
</tbody>
</table>

   What amount should be reported as cost of sales for 1991?
   a. $480,000
   b. $487,500
   c. $520,000
   d. $525,000

25. The Good Trader Company values its inventory by using the retail method (FIFO basis, lower of cost or market). The following information is available for the year 19X8:

<table>
<thead>
<tr>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>$ 80,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>297,000</td>
</tr>
<tr>
<td>Freight-in</td>
<td>4,000</td>
</tr>
<tr>
<td>Shortages</td>
<td>—</td>
</tr>
<tr>
<td>Markups (net)</td>
<td>—</td>
</tr>
<tr>
<td>Markdowns (net)</td>
<td>—</td>
</tr>
<tr>
<td>Sales</td>
<td>—</td>
</tr>
</tbody>
</table>

   At what amount would The Good Trader Company report its ending inventory?
   a. $112,000.
   b. $113,400.
   c. $117,600.
   d. $119,000.

26. The double extension method and the linkchain method are two variations of which of the following inventory cost flow methods?
   a. Moving average.
   b. FIFO.
   c. Dollar value LIFO.
   d. Conventional (lower of cost or market) retail.

27. During 1994, Kam Co. began offering its goods to selected retailers on a consignment basis. The following information was derived from Kam's 1994 accounting records:

<table>
<thead>
<tr>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>$122,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>540,000</td>
</tr>
<tr>
<td>Freight in</td>
<td>10,000</td>
</tr>
<tr>
<td>Transportation to consignees</td>
<td>5,000</td>
</tr>
<tr>
<td>Freight out</td>
<td>35,000</td>
</tr>
<tr>
<td>Ending inventory - held by Kam</td>
<td>145,000</td>
</tr>
<tr>
<td>- held by consignees</td>
<td>20,000</td>
</tr>
</tbody>
</table>

   During 1994, Kam Co. began offering its goods to selected retailers on a consignment basis. The following information was derived from Kam's 1994 accounting records:
In its 1994 income statement, what amount should Kam report as cost of goods sold?

a. $507,000  
b. $512,000  
c. $527,000  
d. $547,000

28. On October 20, 1989, Grimm Co. consigned 40 freezers to Holden Co. for sale at $1,000 each and paid $800 in transportation costs. On December 30, 1989, Holden reported the sale of 10 freezers and remitted $8,500. The remittance was net of the agreed 15% commission. What amount should Grimm recognize as consignment sales revenue for 1989?

a. $7,700  
b. $8,500  
c. $9,800  
d. $10,000

29. On December 28, 1990, Kerr Manufacturing Co. purchased goods costing $50,000. The terms were F.O.B. destination. Some of the costs incurred in connection with the sale and delivery of the goods were as follows:

- Packaging for shipment: $1,000
- Shipping: $1,500
- Special handling charges: $2,000

These goods were received on December 31, 1990. In Kerr’s December 31, 1990, balance sheet, what amount of cost for these goods should be included in inventory?

a. $54,500  
b. $53,500  
c. $52,000  
d. $50,000

30. Kew Co.'s accounts payable balance at December 31, 1990, was $2,200,000 before considering the following data:

- Goods shipped to Kew F.O.B. destination on December 20, 1990, were received on January 6, 1991. The invoice cost was $50,000.

What amount should Kew report as accounts payable in its December 31, 1990, balance sheet?

a. $2,170,000  
b. $2,180,000  
c. $2,230,000  
d. $2,280,000

31. The following information pertains to Deal Corp.'s 1992 cost of goods sold:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory, 12/31/91</td>
<td>$90,000</td>
</tr>
<tr>
<td>1992 purchases</td>
<td>124,000</td>
</tr>
<tr>
<td>1992 write-off of obsolete inventory</td>
<td>34,000</td>
</tr>
<tr>
<td>Inventory, 12/31/92</td>
<td>30,000</td>
</tr>
</tbody>
</table>

The inventory written off became obsolete due to an unexpected and unusual technological advance by a competitor. In its 1992 income statement, what amount should Deal report as cost of goods sold?

a. $218,000  
b. $184,000  
c. $150,000  
d. $124,000

32. Dixon Menswear Shop regularly buys shirts from Colt Company and is allowed trade discounts of 20% and 10% from the list price. Dixon purchased shirts from Colt on May 27, and received an invoice with a list price amount of $5,000, and payment terms of 2/10, n/30. Dixon uses the net method to record purchases. Dixon should record the purchase at

a. $3,600  
b. $3,528  
c. $3,500  
d. $3,430

33. Walt Co. adopted the dollar-value LIFO inventory method as of January 1, 1994, when its inventory was valued at $500,000. Walt's entire inventory constitutes a single pool. Using a relevant price index of 1.10, Walt determined that its December 31, 1994, inventory was $577,500 at current year cost, and $525,000 at base year cost. What was Walt's dollar-value LIFO inventory at December 31, 1994?

a. $525,000  
b. $527,500  
c. $552,500  
d. $577,500
34. The replacement cost of an inventory item is below the net realizable value and above the net realizable value less the normal profit margin. The original cost of the inventory item is below the net realizable value less the normal profit margin. Under the lower of cost or market method, the inventory item should be valued at
a. Net realizable value.
b. Net realizable value less the normal profit margin.
c. Original cost.
d. Replacement cost.

35. For external reporting purposes, it is appropriate to use estimated gross profit rates to determine the cost of goods sold for

<table>
<thead>
<tr>
<th>Interim financial reporting</th>
<th>Year-end financial reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

36. Moss Co. has determined its December 31, 1992, inventory on a FIFO basis to be $400,000. Information pertaining to that inventory follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated selling price</td>
<td>$408,000</td>
</tr>
<tr>
<td>Estimated cost of disposal</td>
<td>20,000</td>
</tr>
<tr>
<td>Normal profit margin</td>
<td>60,000</td>
</tr>
<tr>
<td>Current replacement cost</td>
<td>360,000</td>
</tr>
</tbody>
</table>

Moss records losses that result from applying the lower of cost or market rule. At December 31, 1992, what should be the net carrying value of Moss’ inventory?

a. $400,000
b. $388,000
c. $360,000
d. $238,000

37. Mare Co.'s December 31, 1993, balance sheet reported the following current assets:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 70,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>120,000</td>
</tr>
<tr>
<td>Inventories</td>
<td>60,000</td>
</tr>
<tr>
<td>Total</td>
<td>$250,000</td>
</tr>
</tbody>
</table>

An analysis of the accounts disclosed that accounts receivable consisted of the following:

38. On January 1, 1992, Card Corp. signed a three-year, noncancelable purchase contract, which allows Card to purchase up to 500,000 units of a computer part annually from Hart Supply Co. at $.10 per unit and guarantees a minimum annual purchase of 100,000 units. During 1992, the part unexpectedly became obsolete. Card had 250,000 units of this inventory at December 31, 1992, and believes these parts can be sold as scrap for $.02 per unit. What amount of probable loss from the purchase commitment should Card report in its 1992 income statement?

a. $24,000
b. $20,000
c. $16,000
d. $8,000

39. Union Corp. uses the first-in, first-out retail method of inventory valuation. The following information is available:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>$12,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>60,000</td>
<td>110,000</td>
</tr>
<tr>
<td>Net additional markups</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Net markdowns</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Sales revenue</td>
<td>90,000</td>
<td></td>
</tr>
</tbody>
</table>

If the lower of cost or market rule is disregarded, what would be the estimated cost of the ending inventory?

a. $24,000
b. $20,800
c. $20,000
d. $19,200
40. Which of the following statements are correct when a company applying the lower of cost or market method reports its inventory at replacement cost?
   I. The original cost is less than replacement cost.
   II. The net realizable value is greater than replacement cost.
   a. I only
   b. II only.
   c. Both I and II.
   d. Neither I nor II.

41. Here Co.'s inventory at December 31, 1993, was $1,500,000 based on a physical count priced at cost, and before any necessary adjustment for the following:
   • Merchandise costing $90,000, shipped FOB shipping point from a vendor on December 30, 1993, was received and recorded on January 5, 1994.
   • Goods in the shipping area were excluded from inventory although shipment was not made until January 4, 1994. The goods, billed to the customer FOB shipping point on December 30, 1993, had a cost of $120,000.

What amount should Here report as inventory in its December 31, 1993, balance sheet?
   a. $1,500,000
   b. $1,590,000
   c. $1,620,000
   d. $1,710,000

42. How should the following costs affect a retailer's inventory?

<table>
<thead>
<tr>
<th>Freight in</th>
<th>Interest on inventory loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Increase</td>
<td>No effect</td>
</tr>
<tr>
<td>b. Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>c. No effect</td>
<td>Increase</td>
</tr>
<tr>
<td>d. No effect</td>
<td>No effect</td>
</tr>
</tbody>
</table>

43. Which of the following inventory cost flow methods involves computations based on broad inventory pools of similar items?
   a. Regular quantity of goods LIFO.
   b. Dollar-value LIFO.
   c. Weighted average.
   d. Moving average.

44. The balance in Kemp Corp.'s accounts payable account at December 31, 1989, was $900,000 before any necessary year-end adjustment relating to the following:
   • Goods were in transit to Kemp from a vendor on December 31, 1989. The invoice cost was $50,000. The goods were shipped F.O.B. shipping point on December 29, 1989, and were received on January 4, 1990.
   • Goods shipped F.O.B. destination on December 21, 1989, from a vendor to Kemp were received on January 6, 1990. The invoice cost was $25,000.
   • On December 27, 1989, Kemp wrote and recorded checks to creditors totaling $40,000 that were mailed on January 10, 1990.

In Kemp's December 31, 1989, balance sheet, the accounts payable should be
   a. $940,000
   b. $950,000
   c. $975,000
   d. $990,000

45. Dalton Company adopted the dollar value LIFO inventory method on January 1, 1990. In applying the LIFO method Dalton uses internal price indexes and the multiple-pools approach. The following data were available for Inventory Pool No. 1 for the two years following the adoption of LIFO:

<table>
<thead>
<tr>
<th>Current inventory</th>
<th>Internal price index</th>
</tr>
</thead>
<tbody>
<tr>
<td>At current year cost</td>
<td>At base year cost</td>
</tr>
<tr>
<td>1/1/90</td>
<td>$100,000</td>
</tr>
<tr>
<td>12/31/90</td>
<td>126,000</td>
</tr>
<tr>
<td>12/31/91</td>
<td>140,800</td>
</tr>
</tbody>
</table>

Under the dollar value LIFO method the inventory at December 31, 1991, should be
   a. $128,000
   b. $129,800
   c. $130,800
   d. $140,800
46. The following balances were reported by Mall Co. at December 31, 1991 and 1990:

<table>
<thead>
<tr>
<th></th>
<th>12/31/91</th>
<th>12/31/90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory</td>
<td>$260,000</td>
<td>$290,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>75,000</td>
<td>50,000</td>
</tr>
</tbody>
</table>

Mall paid suppliers $490,000 during the year ended December 31, 1991. What amount should Mall report for cost of goods sold in 1991?

- a. $545,000
- b. $495,000
- c. $485,000
- d. $435,000

47. When the double extension approach to the dollar value LIFO inventory cost flow method is used, the inventory layer added in the current year is multiplied by an index number. How would the following be used in the calculation of this index number?

<table>
<thead>
<tr>
<th>Ending inventory</th>
<th>Ending inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>at current year</td>
<td>at base year</td>
</tr>
<tr>
<td>cost</td>
<td>cost</td>
</tr>
<tr>
<td>a. Numerator</td>
<td>Denominator</td>
</tr>
<tr>
<td>b. Numerator</td>
<td>Not Used</td>
</tr>
<tr>
<td>c. Denominator</td>
<td>Numerator</td>
</tr>
<tr>
<td>d. Not Used</td>
<td>Denominator</td>
</tr>
</tbody>
</table>

48. The original cost of an inventory item is below the net realizable value and above the net realizable value less a normal profit margin. The inventory item's replacement cost is below the net realizable value less a normal profit margin. Under the lower of cost or market method, the inventory item should be valued at

- a. Original cost.
- b. Replacement cost.
- c. Net realizable value.
- d. Net realizable value less normal profit margin.

49. Dart Company's accounting records indicated the following information:

- Inventory, 1/1/86: $500,000
- Purchases during 1986: 2,500,000
- Sales during 1986: 3,200,000

A physical inventory taken on December 31, 1986, resulted in an ending inventory of $575,000. Dart's gross profit on sales has remained constant at 25% in recent years. Dart suspects some inventory may have been taken by a new employee. At December 31, 1986, what is the estimated cost of missing inventory?

- a. $25,000
- b. $100,000
- c. $175,000
- d. $225,000

50. At December 31, 1988, the following information was available from Huff Co.'s accounting records:

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory, 1/1/88</td>
<td>$147,000</td>
<td>$203,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>833,000</td>
<td>1,155,000</td>
</tr>
<tr>
<td>Additional markups</td>
<td></td>
<td>42,000</td>
</tr>
<tr>
<td>Available for sale</td>
<td>$980,000</td>
<td>$1,400,000</td>
</tr>
</tbody>
</table>

Sales for the year totaled $1,106,000. Markdowns amounted to $14,000. Under the approximate lower of average cost or market retail method, Huff's inventory at December 31, 1988, was

- a. $308,000
- b. $280,000
- c. $215,600
- d. $196,000

51. In January 1991 Huff Mining Corporation purchased a mineral mine for $3,600,000 with removable ore estimated by geological surveys at 2,160,000 tons. The property has an estimated value of $360,000 after the ore has been extracted. Huff incurred $1,080,000 of development costs preparing the property for the extraction of ore. During 1991, 270,000 tons were removed and 240,000 tons were sold. For the year ended December 31, 1991, Huff should include what amount of depletion in its cost of goods sold?

- a. $360,000
- b. $405,000
- c. $480,000
- d. $540,000
Recently Released Questions

52. Nest Co. recorded the following inventory information during the month of January:

<table>
<thead>
<tr>
<th>Units</th>
<th>Total</th>
<th>Units on hand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance on 1/1</td>
<td>2,000</td>
<td>$1</td>
</tr>
<tr>
<td>Purchased on 1/8</td>
<td>1,200</td>
<td>3</td>
</tr>
<tr>
<td>Sold on 1/23</td>
<td>1,800</td>
<td>1,400</td>
</tr>
<tr>
<td>Purchased on 1/28</td>
<td>800</td>
<td>5</td>
</tr>
</tbody>
</table>

Nest uses the LIFO method to cost inventory. What amount should Nest report as inventory on January 31 under each of the following methods of recording inventory?

<table>
<thead>
<tr>
<th>Method</th>
<th>Perpetual</th>
<th>Periodic</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>$2,600</td>
<td>$5,400</td>
</tr>
<tr>
<td>b.</td>
<td>$5,400</td>
<td>$2,600</td>
</tr>
<tr>
<td>c.</td>
<td>$2,600</td>
<td>$2,600</td>
</tr>
<tr>
<td>d.</td>
<td>$5,400</td>
<td>$5,400</td>
</tr>
</tbody>
</table>

53. Bach Co. adopted the dollar-value LIFO inventory method as of January 1, 2000. A single inventory pool and an internally computed price index are used to compute Bach’s LIFO inventory layers. Information about Bach’s dollar value inventory follows:

<table>
<thead>
<tr>
<th>Inventory:</th>
</tr>
</thead>
<tbody>
<tr>
<td>At base</td>
</tr>
<tr>
<td>At current</td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>1/1/00</td>
</tr>
<tr>
<td>2000 layer</td>
</tr>
<tr>
<td>2001 layer</td>
</tr>
</tbody>
</table>

What was the price index used to compute Bach’s 2001 dollar value LIFO inventory layer?

| Price Index | a. 1.09  | b. 1.25  | c. 1.33  | d. 2.00  |

54. During periods of inflation, a perpetual inventory system would result in the same dollar amount of ending inventory as a periodic inventory system under which of the following inventory valuation methods?

<table>
<thead>
<tr>
<th>Method</th>
<th>FIFO</th>
<th>LIFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>b.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>d.</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

55. The following information pertained to Azur Co. for the year:

| Purchases | $102,800 |
| Purchase discounts | 10,280 |
| Freight-in | 15,420 |
| Freight-out | 5,140 |
| Beginning inventory | 30,840 |
| Ending inventory | 20,560 |

What amount should Azur report as a cost of goods sold for the year?

| Amount | a. $102,800 | b. $118,220 | c. $123,360 | d. $128,500 |

56. Rose Co. sells on product and uses the last-in, first-out method to determine inventory cost. Information for the month of January 1999 follows:

<table>
<thead>
<tr>
<th>Total Units</th>
<th>Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory, 1/1/99</td>
<td>8,000</td>
</tr>
<tr>
<td>Purchases, 1/15/99</td>
<td>12,000</td>
</tr>
<tr>
<td>Sales</td>
<td>10,000</td>
</tr>
</tbody>
</table>

Rose has determined that at January 31, 1999, the replacement cost of its inventory was $8 per unit and the net realizable value was $8.80 per unit. Rose’s normal profit margin is $1 per unit. Rose applies the lower cost or market rule to total inventory and records any resulting loss. At January 31, 1999, what should be the net carrying amount of Rose’s inventory?

| Amount | a. $79,000 | b. $79,800 | c. $80,000 | d. $81,400 |

57. A flash flood swept through Hat, Inc.’s warehouse on May 1. After the flood, Hat’s accounting records showed the following:

| Inventory | $ 35,000 |
| Purchases, January 1 through May 1 | 200,000 |
| Sales, January 1 through May 1 | 250,000 |
| Inventory not damaged by flood | 30,000 |
| Gross profit percentage on sales | 40% |

What amount of inventory was lost in the flood?

| Amount | a. $55,000 | b. $85,000 | c. $120,000 | d. $150,000 |
58. Nomar Co. shipped inventory on consignment to Seabright Co. that cost $20,000. Seabright paid $500 for advertising that was reimbursable from Nomar. At the end of the year, 70% of the inventory was sold for $30,000. The agreement states that a commission of 20% will be provided to Seabright for all sales. What amount of net inventory on consignment remains on the balance sheet for the first year for Nomar?
   a. $0  
   b. $6,000  
   c. $6,500  
   d. $20,000

59. Cantor Co. purchased a coal mine for $2,000,000. It cost $500,000 to prepare the coal mine for extraction of the coal. It was estimated that 750,000 tons of coal would be extracted from the mine during its useful life. Cantor planned to sell the property for $100,000 at the end of its useful life. During the current year, 15,000 tons of coal were extracted and sold. What would be Cantor’s depletion amount per ton for the current year?
   a. $2.50  
   b. $2.60  
   c. $3.20  
   d. $3.30

60. Trans co. uses a periodic inventory system. The following are inventory transactions from the month of January.
   1/1 Beginning Inventory 10,000 units at $3
   1/5 Purchase 5,000 units at $4
   1/15 Purchase 5,000 units at $5
   1/20 Sales at $10 per unit 10,000 units

   Trans uses the average pricing method to determine the values of its inventory. What amount should Trans report as cost of goods sold on its income statement for the month of January?
   a. $30,000  
   b. $37,500  
   c. $40,000  
   d. $100,000

61. A corporation entered into a purchase commitment to buy inventory. At the end of the accounting period, the current market value of the inventory was less than the fixed purchase price, by a material amount. Which of the following accounting treatments is most appropriate?
   a. Describe the nature of the contract in a note to the financial statements, recognize a loss in the income statement, and recognize a liability for the accrued loss.
   b. Describe the nature of the contract and the estimated amount of the loss in a note to the financial statements, but do not recognize a loss in the income statement.
   c. Describe the nature of the contract in a note to the financial statements, recognize a loss in the income statement, and recognize a reduction in inventory equal to the amount of the loss by use of a valuation account.
   d. Neither describe the purchase obligation, nor recognize a loss on the income statement or balance sheet.

62. The following costs pertain to Den Co.’s purchase of inventory:
   700 units of product A $3,750
   Freight-in 175
   Cost of materials and labor incurred to bring product A to saleable condition 900
   Insurance cost during transit of purchased good 100
   Total $4,925

   What amount should Den record as the cost of inventory as a result of this purchase?
   a. $3,925  
   b. $4,650  
   c. $4,825  
   d. $4,925

63. At the end of the year, Ian Co. determined its inventory to be $258,000 on a FIFO (first in, first out) basis. The current replacement cost of this inventory was $230,000. Ian estimates that it could sell the inventory for $275,000 at a disposal cost of $14,000. If Ian’s normal profit margin for it inventory was $10,000, what would be its next carrying value?
   a. $244,000  
   b. $251,000  
   c. $258,000  
   d. $261,000
64. Seafood Trading Co. commenced operations during the year as a large importer and exporter of seafood. The imports were all from one country overseas. The export sales were conducted as drop shipments and were merely transshipped at Seattle. Seafood Trading reported the following data:

Purchase during the year $12.0 million
Shipping costs from overseas 1.5 million
Shipping costs to export customers 1.0 million
Inventory at year end 3.0 million

What amount of shipping costs should be included in Seafood Trading’s year-end inventory valuation?

a. $0  
b. $250,000  
c. $375,000  
d. $625,000

65. Which inventory costing method would a company that wishes to maximize profits in a period of rising prices use?

a. FIFO  
b. Dollar-value LIFO  
c. Weighted average  
d. Moving average.

69. Which of the following inventory methods allow inventory to be reported at fair value?

a. FIFO  
b. Weighted average  
c. Specific identification  
d. None of the above

70. XYZ reported the following data for its inventory at the end of the year:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$95,000</td>
</tr>
<tr>
<td>Replacement Cost</td>
<td>$92,000</td>
</tr>
<tr>
<td>Net realizable value</td>
<td>$93,000</td>
</tr>
<tr>
<td>NRV less a normal profit</td>
<td>$91,000</td>
</tr>
</tbody>
</table>

Under IFRS at what amount would the inventory be reported on the balance sheet?

a. $95,000  
b. $92,000  
c. $93,000  
d. $91,000

66. Which of the following inventory methods is not acceptable under IFRS?

a. Specific identification  
b. FIFO  
c. LIFO  
d. Weighted average

67. Which of the following inventory methods are acceptable under IFRS?

a. Weighted average on LIFO  
b. FIFO and specific identification  
c. LIFO and dollar-value LIFO  
d. FIFO and LIFO

68. Which of the following IFRS inventory methods would not report their inventory at lower of cost or net realizable value?

a. Biological inventory items  
b. FIFO  
c. Weighted average  
d. Specific identification

71. ABC has the following data available for one of its products:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$5.00</td>
</tr>
<tr>
<td>Replacement Cost</td>
<td>$5.50</td>
</tr>
<tr>
<td>Net realizable value</td>
<td>$5.25</td>
</tr>
<tr>
<td>NRV less a normal profit</td>
<td>$4.95</td>
</tr>
</tbody>
</table>

What amount would be reported for this item under IFRS?

a. $5.00  
b. $5.50  
c. $5.25  
d. $4.95

72. XYZ has the following data available for one of its products at the end of year 1:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$10.00</td>
</tr>
<tr>
<td>Replacement cost</td>
<td>$9.75</td>
</tr>
<tr>
<td>Net realizable value</td>
<td>$9.50</td>
</tr>
<tr>
<td>NRV less normal profit</td>
<td>$9.00</td>
</tr>
</tbody>
</table>

What amount would be reported for this item under IFRS?

a. $9.00  
b. $9.50  
c. $9.75  
d. $10.00
73. In year 2, XYZ had the same unit in inventory as reported in question #72 and disclosed the following data:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$10.00</td>
</tr>
<tr>
<td>Replacement cost</td>
<td>$10.50</td>
</tr>
<tr>
<td>Net realizable value</td>
<td>$10.25</td>
</tr>
<tr>
<td>NRV less a normal profit</td>
<td>$9.75</td>
</tr>
</tbody>
</table>

What amount would be reported in the balance sheet for this item under IFRS?

a. $10.00  
b. $10.50  
c. $9.75  
d. $10.25
Chapter Three
Inventories Problems

NUMBER 1

The Jericho Variety Store uses the LIFO retail inventory method. Information relating to the computation of the inventory at December 31, 19X5 follows:

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory, January 1, 19X5</td>
<td>$29,000</td>
<td>$45,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>120,000</td>
<td>172,000</td>
</tr>
<tr>
<td>Freight-in</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td></td>
<td>190,000</td>
</tr>
<tr>
<td>Net markups</td>
<td></td>
<td>40,000</td>
</tr>
<tr>
<td>Net markdowns</td>
<td></td>
<td>12,000</td>
</tr>
</tbody>
</table>

**Required:**
Assuming that there was no change in the price index during the year, compute the inventory at December 31, 19X5 using the LIFO cost retail inventory method.

NUMBER 2 consists of three unrelated parts.

**Part a.** The Frate Company was formed on December 1, 19X8. The following information is available from Frate's inventory records for Product Ply:

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 19X9 (beginning inventory)</td>
<td>800</td>
<td>$9.00</td>
</tr>
<tr>
<td>Purchases:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 5, 19X9</td>
<td>1,500</td>
<td>$10.00</td>
</tr>
<tr>
<td>January 25, 19X9</td>
<td>1,200</td>
<td>$10.50</td>
</tr>
<tr>
<td>February 16, 19X9</td>
<td>600</td>
<td>$11.00</td>
</tr>
<tr>
<td>March 26, 19X9</td>
<td>900</td>
<td>$11.50</td>
</tr>
</tbody>
</table>

A physical inventory on March 31, 19X9, shows 1,600 units on hand.

**Required:**
Prepare schedules to compute the ending inventory at March 31, 19X9, under each of the following inventory methods:

1. FIFO.
2. LIFO.
3. Weighted average.

Show supporting computations in good form.

**Part b.** The Red Department Store uses the retail inventory method. Information relating to the computation of the inventory at December 31, 19X8, is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory at January 1, 19X8</td>
<td>$32,000</td>
<td>$80,000</td>
</tr>
<tr>
<td>Sales</td>
<td>600,000</td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>270,000</td>
<td>590,000</td>
</tr>
<tr>
<td>Freight in</td>
<td>7,600</td>
<td></td>
</tr>
<tr>
<td>Markups</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td>Markup cancellations</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Markdowns</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>Markdown cancellations</td>
<td>5,000</td>
<td></td>
</tr>
</tbody>
</table>

Estimated normal shrinkage is 2% of sales.
Required:
Prepare a schedule to calculate the estimated ending inventory at the lower of average cost or market at December 31, 19X8, using the retail inventory method. Show supporting computations in good form.

Part c. On November 21, 19X8, a fire at Hodge Company's warehouse caused severe damage to its entire inventory of Product Tex. Hodge estimates that all usable damaged goods can be sold for $10,000. The following information was available from Hodge's accounting records for Product Tex:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory at November 1, 19X8</td>
<td>$100,000</td>
</tr>
<tr>
<td>Purchases from November 1, 19X8, to date of fire</td>
<td>$140,000</td>
</tr>
<tr>
<td>Net sales from November 1, 19X8, to date of fire</td>
<td>$220,000</td>
</tr>
</tbody>
</table>

Based on recent history, Hodge had a gross margin (profit) on Product Tex of 30% of net sales.

Required:
Prepare a schedule to calculate the estimated loss on the inventory in the fire, using the gross margin (profit) method. Show supporting computations in good form.

NUMBER 3
In order to effect an approximate matching of current costs with related sales revenue, the last-in, first-out (LIFO) method of pricing inventories has been developed.

Required:
a. Describe the establishment of and subsequent pricing procedures for each of the following LIFO inventory methods:
   1. LIFO applied to units of product when the periodic inventory system is used.
   2. Application of the dollar-value method to a retail LIFO inventory or to LIFO units of product (these applications are similar).
b. Discuss the specific advantages and disadvantages of using the dollar-value-LIFO applications. Ignore income tax considerations.
c. Discuss the general advantages and disadvantages claimed for LIFO methods. Ignore income tax considerations.

NUMBER 4
Huddell Company, which is both a wholesaler and retailer, purchases merchandise from various suppliers FOB destination, and incurs substantial warehousing costs.

The dollar value LIFO method is used for the wholesale inventories.

Huddell determines the estimated cost of its retail ending inventories using the conventional retail inventory method, which approximates lower of average cost or market.

Required:
a. When should the purchases from various suppliers generally be included in Huddell's inventory? Why?
b. How should Huddell account for the warehousing costs? Why?
c. 1. What are the advantages of using the dollar value LIFO method as opposed to the traditional LIFO method?
   2. How does the application of the dollar value LIFO method differ from the application of the traditional LIFO method?
d. 1. In the calculation of the cost to retail percentage used to determine the estimated cost of its ending retail inventories, how should Huddell use
   • Net markups?
   • Net markdowns?
   2. Why does Huddell's retail inventory method approximate lower of average cost or market?
**NUMBER 5**

The Acute Company manufactures a single product. On December 31, 19X5, Acute adopted the dollar-value LIFO inventory method. The inventory on that date using the dollar-value LIFO inventory method was determined to be $300,000.

Inventory data for succeeding years are as follows:

<table>
<thead>
<tr>
<th>Year Ended December 31</th>
<th>Inventory at Respective Year-End Prices</th>
<th>Relevant Price Index (base year 19X5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19X6</td>
<td>$363,000</td>
<td>1.10</td>
</tr>
<tr>
<td>19X7</td>
<td>420,000</td>
<td>1.20</td>
</tr>
<tr>
<td>19X8</td>
<td>430,000</td>
<td>1.25</td>
</tr>
</tbody>
</table>

**Required:**
Compute the inventory amounts at December 31, 19X6, 19X7 and 19X8, using the dollar-value LIFO inventory method for each year.

**NUMBER 6**

Retail, Inc., sells normal brand name household products both from its own store and on consignment through The Mall Space Company.

**Required:**

a. Should Retail, Inc., include in its inventory normal brand name goods purchased from its suppliers but not yet received if the terms of purchase are FOB shipping point (manufacturer's plant)? Why?

b. Should Retail, Inc., include freight-in expenditures as an inventoriable cost? Why?

c. Retail, Inc., purchased cooking utensils for sale in the ordinary course of business three times during the current year, each time at a higher price than the previous purchase. What would have been the effect on ending inventory and cost of goods sold had Retail, Inc., used the weighted-average cost method instead of the FIFO method?

d. How and why will Retail, Inc., treat net markdowns when it calculates the estimated cost of ending inventory using the conventional (lower of cost or market) retail inventory method?

e. What are products on consignment and how should they be presented on the balance sheets of Retail, Inc., and The Mall Space Company?

**NUMBER 7**

Happlia Co. imports expensive household appliances. Each model has many variations and each unit has an identification number. Happlia pays all costs for getting the goods from the port to its central warehouse in Des Moines. After repackaging, the goods are consigned to retailers. A retailer makes a sale, simultaneously buys the appliance from Happlia, and pays the balance due within one week.

To alleviate the overstocking of refrigerators at a Minneapolis retailer, some were reshipped to a Kansas City retailer where they were still held in inventory at December 31, 1990. Happlia paid the costs of this reshipment.

Happlia uses the specific identification inventory costing method.
**Required:**

a. In regard to the specific identification inventory costing method
   1. Describe its key elements.
   2. Discuss why it is appropriate for Happlia to use this method.

b. 1. What general criteria should Happlia use to determine inventory carrying amounts at December 31, 1990?
   Ignore lower of cost or market considerations.
   2. Give four examples of costs included in these inventory carrying amounts.

c. What costs should be reported in Happlia's 1990 income statement? Ignore lower of cost or market considerations.

**NUMBER 8**

Blaedon Co. makes ongoing design refinements to lawnmowers that are produced for it by contractors. Blaedon stores the lawnmowers in its own warehouse and sells them at list price, directly to retailers. Blaedon uses the FIFO inventory method. Approximately two-thirds of new lawnmower sales involve trade-ins. For each used lawnmower traded in and returned to Blaedon, retailers receive a $40 allowance regardless of whether the trade-in was associated with a sale of a 1992 or 1993 model. Blaedon’s net realizable value on a used lawnmower averages $25.

At December 31, 1992, Blaedon’s inventory of new lawnmowers includes both 1992 and 1993 models. When the 1993 model was introduced in September 1992, the list price of the remaining 1992 model lawnmowers was reduced below cost. Blaedon is experiencing rising costs.

**Required:**

a. At December 31, 1992, how should Blaedon determine the carrying amounts assigned to its lawnmower inventory of
   1. 1993 models?
   2. 1992 models?

b. Considering only the 1993 model lawnmower, explain the impact of the FIFO cost flow assumptions on Blaedon’s 1992
   1. Income statement amounts.
   2. Balance sheet amounts.

**NUMBER 9**

Taylor Company, a household appliance dealer, purchases its inventories from various suppliers. Taylor has consistently stated its inventories at the lower of cost (FIFO) or market.

**Required:**

a. Taylor is considering alternate methods of accounting for the cash discounts it takes when paying its suppliers promptly. From a theoretical standpoint, discuss the acceptability of each of the following methods:
   1. Financial income when payments are made.
   2. Reduction of cost of goods sold for period when payments are made.
   3. Direct reduction of purchase cost.

b. Identify the effects on both the balance sheet and the income statement of using the LIFO inventory method instead of the FIFO method over a substantial time period when purchase prices of household appliances are rising. State why these effects take place.

c. Why is the lower of cost-or-market rule used for valuing inventories when the FIFO method is used?
NUMBER 10

Steel Company, a wholesaler that has been in business for two years, purchases its inventories from various suppliers. During the two years, each purchase has been at a lower price than the previous purchase.

Steel uses the lower of FIFO cost or market method to value inventories. The original cost of the inventories is above replacement cost and below the net realizable value. The net realizable value less the normal profit margin is below the replacement cost.

Required:

a. In general, what criteria should be used to determine which costs should be included in inventory?

b. In general, why is the lower of cost or market rule used to report inventory?

c. At what amount should Steel's inventories be reported on the balance sheet? Explain the application of the lower of cost or market rule in this situation.

d. What would have been the effect on ending inventories and net income for the second year had Steel used the lower of average cost or market inventory method instead of the lower of FIFO cost or market inventory method? Why?

NUMBER 11

York Co. sells one product, which it purchases from various suppliers. York’s trial balance at December 31, 1993, included the following accounts:

Sales (33,000 units @ $16) $528,000
Sales discounts 7,500
Purchases 368,900
Purchase discounts 18,000
Freight-in 5,000
Freight-out 11,000

York Co.’s inventory purchases during 1993 were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Cost per unit</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory, January 1</td>
<td>8,000</td>
<td>$8.20</td>
<td>$65,600</td>
</tr>
<tr>
<td>Purchases, quarter ended March 31</td>
<td>12,000</td>
<td>8.25</td>
<td>99,000</td>
</tr>
<tr>
<td>Purchases, quarter ended June 30</td>
<td>15,000</td>
<td>7.90</td>
<td>118,500</td>
</tr>
<tr>
<td>Purchases, quarter ended September 30</td>
<td>13,000</td>
<td>7.50</td>
<td>97,500</td>
</tr>
<tr>
<td>Purchases, quarter ended December 31</td>
<td>7,000</td>
<td>7.70</td>
<td>53,900</td>
</tr>
<tr>
<td></td>
<td>55,000</td>
<td></td>
<td>$434,500</td>
</tr>
</tbody>
</table>

Additional information:

York's accounting policy is to report inventory in its financial statements at the lower of cost or market, applied to total inventory. Cost is determined under the last-in, first-out (LIFO) method.

York has determined that, at December 31, 1993, the replacement cost of its inventory was $8 per unit and the net realizable value was $8.80 per unit. York's normal profit margin is $1.05 per unit.

Required:

a. Prepare York's schedule of cost of goods sold, with a supporting schedule of ending inventory. York uses the direct method of reporting losses from market decline of inventory.

b. Explain the rule of lower of cost or market and its application in this situation.
Chapter Three
Solutions to Inventories Questions

1. (a) Answers (b)-(d), cash discounts, purchase returns and allowances, and cost of transportation-in all occur after the actual purchase and would be accounted for separately in cost of goods sold. Trade discounts are deducted from a list price in arriving at the price charged the buyer and recorded on the purchase invoice and would not be recorded separately.

2. (d) $512,000

<table>
<thead>
<tr>
<th></th>
<th>Warehouse</th>
<th>Consignees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>$110,000</td>
<td>$12,000</td>
<td>$122,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>480,000</td>
<td>60,000</td>
<td>540,000</td>
</tr>
<tr>
<td>Freight-in</td>
<td>10,000</td>
<td>—</td>
<td>10,000</td>
</tr>
<tr>
<td>Transportation to consignees</td>
<td>—</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Cost of goods available for sale</td>
<td>—</td>
<td>—</td>
<td>$677,000</td>
</tr>
<tr>
<td>Less: Ending inventory</td>
<td>145,000</td>
<td>20,000</td>
<td>(165,000)</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td></td>
<td></td>
<td>$512,000</td>
</tr>
</tbody>
</table>

Consigned goods are a part of the consignor's inventory until sold. Inventory out on consignment is valued at cost plus the cost of shipping to the consignee. Freight-out is a selling expense.

3. (d) Opal's inventory must be reduced by the following:
   - The 40% markup on selling price included in merchandise out on consignment (40% × $40,000) $16,000
   - Goods held on consignment which are not part of Opal's inventory 27,000
   Total reduction to inventory $43,000

4. (b) Using the moving average method, a recalculated average cost is computed with each purchase as follows:

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Cost</th>
<th>Total</th>
<th>Total</th>
<th>Average per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units</td>
<td>Cost</td>
<td>Units</td>
<td>Cost</td>
<td></td>
</tr>
<tr>
<td>1/1/93</td>
<td>1,000</td>
<td>$1,000</td>
<td>1,000</td>
<td>$1,000</td>
<td>$1.00</td>
</tr>
<tr>
<td>1/7/93</td>
<td>600</td>
<td>1,800</td>
<td>1,600</td>
<td>2,800</td>
<td>1.75</td>
</tr>
<tr>
<td>1/20/93</td>
<td>(900)</td>
<td>(1,575)*</td>
<td>700</td>
<td>1,225</td>
<td>1.75</td>
</tr>
<tr>
<td>1/25/93</td>
<td>400</td>
<td>2,000</td>
<td>1,100</td>
<td>3,225</td>
<td>2.93</td>
</tr>
</tbody>
</table>

*900 units @ $1.75 average cost = $1,575.

Sale of units on January 20 does not affect the moving-average cost, therefore, the moving-average unit cost after the sale is the same as before the sale, $1.75.

5. (b) Using LIFO, the inventory account appears as follows:

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Cost per</th>
<th>Total</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units</td>
<td>Unit</td>
<td>Cost</td>
<td>Units</td>
</tr>
<tr>
<td>1/1/93</td>
<td>1,000</td>
<td>$1.00</td>
<td>$1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>1/7/93</td>
<td>600</td>
<td>3.00</td>
<td>1,800</td>
<td>1,600</td>
</tr>
<tr>
<td>1/20/93</td>
<td>(600)</td>
<td>3.00</td>
<td>(1,800)</td>
<td>700</td>
</tr>
<tr>
<td>1/25/93</td>
<td>400</td>
<td>5.00</td>
<td>2,000</td>
<td>1,100</td>
</tr>
</tbody>
</table>
The units sold on 1/20 would be 600 units from the 1/7 purchase and 300 units from the 1/1/ balance.

The ending inventory consists of:

<table>
<thead>
<tr>
<th>Units</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>$1</td>
<td>$700</td>
</tr>
<tr>
<td>400</td>
<td>$5</td>
<td>2000</td>
</tr>
<tr>
<td>1100</td>
<td></td>
<td>2700</td>
</tr>
</tbody>
</table>

6. (a) Under the FIFO method, the cost of the oldest purchases are charged to cost of goods sold and the costs of the most current purchases are assigned to ending inventory. Therefore, the costs assigned to ending inventory and cost of goods sold are the same when a periodic or perpetual inventory system is used with the FIFO cost flow assumption.

7. (c) List price $5,000

Less 30% trade discount (30% × $5,000) = $1,500

Less 20% trade discounts (20% × $3,500) = $700

Gross sales revenue = $2,800

Less 2% cash discount (2% × $2,800) = $56

Net sales revenue = $2,744

Add: Burr's delivery costs paid by Pitt = $200

Total payment due within discount period = $2,944

Trade discounts are discounts from catalog or list prices used to establish a pricing policy and, therefore, do not enter into the accounting system. (They are deducted prior to arriving at the invoice price.) Each discount applies to the net price computed after deducting the previous discount. The delivery costs are appropriately the responsibility of Burr as the merchandise was shipped F.O.B. shipping point.

8. (c) The LIFO inventory method assumes the last unit acquired is the first unit sold. Therefore, during periods of rising prices, LIFO would result in lower ending inventory valuations (earlier purchases constitute inventory), higher cost of goods sold and lower net income than the FIFO inventory method.

9. (a) Theoretically, warehousing costs increase inventory cost and cash discounts (whether taken or not taken) decrease inventory cost. Frequently, these items are difficult to associate with inventory and are therefore expensed or ignored in costing ending inventory.

10. (b) Under the FIFO method, the cost of the oldest purchases is matched with current revenue and the cost of the most current purchases remains in ending inventory. This would result in a book value for inventory under a perpetual system which would be the same as that of the physical inventory taken under a periodic inventory method.

11. (b) In applying the lower of cost or market method, market is defined as current replacement cost, except that:

**Upper limit:** Market is not to exceed net realizable value (estimated selling price less costs of completion and disposal).

**Lower limit:** Market should not be less than net realizable value less a normal profit margin.

If, under the lower of cost or market method, inventory is reported at replacement cost, it is the market value, and must be less than the original cost and greater than the net realizable value less a normal profit margin (the lower limit on market).

12. (c) Inventory, 1/1 = $80,000

Plus: Purchases = $330,000

Good available for sale = $410,000

Less: Cost of goods sold ($360,000 ÷ 120%) = $300,000

Estimated inventory, 5/2 = $110,000

**Note:** Although the estimated inventory is $110,000, the estimated fire loss would be $70,000 because of the $40,000 of goods in transit included in inventory.
13. (c) If the purchase was omitted from both inventory and accounts payable, both the assets and liabilities will be understated. Because the two errors offset each other, there will be no effect on stockholders' equity and net earnings.

14. (b) If the inventory balance was lower using FIFO than LIFO, then prices during the period were moving downward. By using FIFO during such a period, the higher-priced items are costed out first with lower-priced goods remaining in the ending inventory.

15. (c) Market is defined as current replacement cost, except that:

**Upper Limit**: Market is not to exceed net realizable value (estimated selling price less costs of completion and disposal).

**Lower Limit**: Market should not be less than net realizable value reduced by a normal profit margin.

<table>
<thead>
<tr>
<th></th>
<th>Product #1</th>
<th>Product #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling price</td>
<td>$30.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>Less: Cost to dispose</td>
<td>5.00</td>
<td>26.00</td>
</tr>
<tr>
<td>Net realizable value (upper limit)</td>
<td>25.00</td>
<td>74.00</td>
</tr>
<tr>
<td>Profit margin</td>
<td>9.00</td>
<td>30.00</td>
</tr>
<tr>
<td>Lower limit</td>
<td>$16.00</td>
<td>$44.00</td>
</tr>
<tr>
<td>Market value</td>
<td>$16.00</td>
<td>$46.00</td>
</tr>
<tr>
<td>Cost</td>
<td>17.00</td>
<td>45.00</td>
</tr>
<tr>
<td>Lower cost/market</td>
<td>16.00</td>
<td>45.00</td>
</tr>
</tbody>
</table>

16. (c) When beginning inventory is understated, cost of goods sold will be understated by the same amount. When ending is overstated, cost of goods sold will be understated in an equal amount. Therefore, the effect of both of these errors is to understate cost of goods sold by $78,000 ($26,000 + $52,000).

17. (c) $9.20

<table>
<thead>
<tr>
<th></th>
<th>Product #1</th>
<th>Product #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory 1/11</td>
<td>1,600 units @ $8.00* = $12,800</td>
<td></td>
</tr>
<tr>
<td>Purchase 1/22</td>
<td>4,800 units @ $9.60 = 46,080</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6,400 units</td>
<td>$58,880</td>
</tr>
</tbody>
</table>

Moving average unit cost @ 1/31 = $58,880/6,400 units

= $9.20 per unit

* Sale of unit on January 11 does not affect the moving-average cost; therefore, the moving-average unit cost after the sale is the same as before the sale, $8.00 per unit.

18. (a) Beginning inventory, purchases, and purchase returns are included in the calculation of both cost and retail amounts of goods available for sale in the retail inventory method.

Answer (b) is incorrect, as sales returns is an adjustment of sales, and neither are used in the computation of goods available for sale.

Answer (c) is incorrect as net markups affect only the retail value, and answer (d) is incorrect as freight-in affects only the cost value of goods available for sale.

19. (c) $2.30

<table>
<thead>
<tr>
<th>Costs:</th>
<th>Land 9,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restoration</td>
<td>1,200,000</td>
</tr>
<tr>
<td></td>
<td>10,200,000</td>
</tr>
<tr>
<td>Less:</td>
<td>Salvage 1,000,000</td>
</tr>
<tr>
<td></td>
<td>$9,200,000</td>
</tr>
<tr>
<td>Divided by recoverable reserves</td>
<td>4,000,000 tons</td>
</tr>
<tr>
<td>Depletion per ton</td>
<td>$2.30</td>
</tr>
</tbody>
</table>
20. (a) As inventory prices are expected to generally increase during the year, the perpetual inventory system would maximize the inventory carrying value at the end of the period. Under a perpetual inventory system cost of goods sold (used in production) is determined at the time of each sale (issuance of materials to production). Therefore, it would provide for the earlier, lower costs to be transferred out of inventory and the ending inventory to be costed with the later, higher costs.

Application of the lower of cost or market rule to the total inventory would maximize the inventory carrying value at the end of the year, as total inventory cost would be compared with total inventory market value and price increases would offset price decreases. Lower of cost or market applied to individual items given the most conservative (lowest) inventory carrying amount as price increases for some items are not allowed to offset price declines for other items.

21. (a) FIFO-based cost of goods sold contains earlier unit costs and LIFO-based cost of goods sold contains more recent unit costs. Higher cost of goods sold under FIFO indicates that the earlier unit costs were larger than the more recent unit costs, and this is attributable to the fact that prices have decreased.

22. (c) The liability for consigned merchandise is recorded when the merchandise is sold. Since 500 sweaters have been sold, the amount due is the selling price less the 10% commission, or $100 – $10 = $90 × 500 sweaters = $45,000.

23. (b) $185,000 cost of inventory.

| Inventory 1/17 (40,000 – 35,000) | 5,000 units @ $5 = $25,000 * |
| Purchase 1/28 | 20,000 units @ $8 = 160,000 |
| 25,000 units | $185,000 |
* Sale of units on January 17 does not affect the moving-average cost, therefore, the moving-average unit cost after the sale is the same as before the sale, $5 per unit.

Moving average unit cost at January 31 would be: $185,000 total cost/25,000 units = $7.40 per unit

24. (d) $525,000 cost of goods sold.

<table>
<thead>
<tr>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventories and purchases</td>
<td>$600,000</td>
</tr>
<tr>
<td>Net markups</td>
<td></td>
</tr>
<tr>
<td>Available for sale</td>
<td>$600,000</td>
</tr>
<tr>
<td>Cost/retail ratio</td>
<td>$600,000/960,000 = .625</td>
</tr>
<tr>
<td>Less: Net markdowns</td>
<td>(60,000)</td>
</tr>
<tr>
<td>Sales</td>
<td>(780,000)</td>
</tr>
<tr>
<td>Ending inventory at retail</td>
<td>$120,000</td>
</tr>
<tr>
<td>Ending inventory at cost</td>
<td>$(120,000 × .625) = 75,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>$525,000</td>
</tr>
</tbody>
</table>

Conventional retail is the lower of average cost or market. For a lower of cost or market retail method, net markdowns are excluded from the cost to retail ratio.

25. (a) $301,000 cost of goods sold.

<table>
<thead>
<tr>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases</td>
<td>$297,000</td>
</tr>
<tr>
<td>Freight-in</td>
<td>4,000</td>
</tr>
<tr>
<td>Mark-ups</td>
<td></td>
</tr>
<tr>
<td>Current period values</td>
<td>$301,000</td>
</tr>
<tr>
<td>Beginning inventory</td>
<td>140,000</td>
</tr>
<tr>
<td>Shortages</td>
<td>(8,000)</td>
</tr>
<tr>
<td>Mark-downs</td>
<td>(2,000)</td>
</tr>
<tr>
<td>Sales</td>
<td>(400,000)</td>
</tr>
<tr>
<td>Ending inventory at retail</td>
<td>$160,000</td>
</tr>
</tbody>
</table>

Current period cost ratio = $301,000 / 430,000 = 70%

Ending inventory, FIFO cost 70% × $160,000 = $112,000
As method is the lower of FIFO cost or market, markdowns are excluded from the cost ratio computation, and the cost ratio computation is made for the current period purchases as it constitutes the ending inventory under FIFO.

Note that if the ending inventory at retail were greater than $430,000, a portion of the beginning inventory would be used, and its cost ratio would be used for its costing.

26. (c) Dollar value LIFO uses price indexes, by year, to compute the increase or decrease in LIFO layers during the period. "Double-extension" and "Chain-link" methods are techniques of computing price indexes for the valuation of inventory. Under "Chain-link", the current price index is computed in relation to the prior period index; under "Double-extension" the current price index is computed in relation to a base year.

27. (b) $512,000. Consigned goods are part of the consignor's inventory until sold. Inventory out on consignment is valued at cost, including the cost of shipping the goods to the consignee. Freight-out is a selling expense.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>$122,000</td>
</tr>
<tr>
<td>Add: Purchases</td>
<td>540,000</td>
</tr>
<tr>
<td>Freight-in</td>
<td>10,000</td>
</tr>
<tr>
<td>Transportation to consignee</td>
<td>5,000</td>
</tr>
<tr>
<td>Cost of goods available for sale</td>
<td>$677,000</td>
</tr>
<tr>
<td>Less: Ending inventory:</td>
<td></td>
</tr>
<tr>
<td>on Hand</td>
<td>145,000</td>
</tr>
<tr>
<td>at Consignees</td>
<td>20,000</td>
</tr>
<tr>
<td>(165,000)</td>
<td></td>
</tr>
<tr>
<td>$512,000</td>
<td></td>
</tr>
</tbody>
</table>

28. (d) $10,000 = 10 units sold × $1,000 sales price per unit. Consigned goods are a part of the consignor's inventory until sold, and are valued at cost plus the cost of shipping to the consignee. The consignee acts only as an agent of the consignor and receives a commission when the goods are sold. As the goods were reported sold in December, the consignor (Grimm Co.) would recognize sales revenue of $10,000 and related commission expense of $1,500 ($10,000 × 15%) in December. The cost of goods sold for these units would include $200 ($800 ÷ 40 units = $20 per unit × 10 units sold) of the transportation costs.

29. (d) Title to goods shipped “FOB Destination” transfers to the purchaser when the goods are delivered to the buyer’s destination. Costs of transportation and costs while in transit are expenses of the seller, and would not affect the “cost” to the buyer.

30. (a) $2,170,000.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable before adjustment</td>
<td>$2,200,000</td>
</tr>
<tr>
<td>Add: Goods in transit—FOB shipping point</td>
<td>40,000</td>
</tr>
<tr>
<td>Less: Purchase returns in transit</td>
<td>(70,000)</td>
</tr>
<tr>
<td>Accounts payable—December 31, 1990</td>
<td>$2,170,000</td>
</tr>
</tbody>
</table>

Title to goods shipped "FOB Shipping Point" transfers to the purchaser at the shipping point when the seller delivers them to a common carrier, which is acting as an agent for the buyer. Such goods, in transit, would be included in the purchaser's inventory and the associated liability included in its accounts payable. Title to goods shipped "FOB Destination" transfers to the purchaser when the goods are delivered to the buyer's destination. Such goods in transit would not be recorded by the purchaser. They are properly included in the seller's inventory.

31. (c) Beginning balance $ 90,000

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add: Purchases</td>
<td>124,000</td>
</tr>
<tr>
<td>Less: Loss on obsolete inventory</td>
<td>(34,000)</td>
</tr>
<tr>
<td>Available for sale</td>
<td>$180,000</td>
</tr>
<tr>
<td>Less: Ending inventory</td>
<td>(30,000)</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>$150,000</td>
</tr>
</tbody>
</table>
32. (b) List Price $5,000
   Less: Trade discounts
   20% × $5,000 (1,000)
   10% × $4,000 (400)
   Gross Purchase (Invoice) price $3,600
   Less: Cash discount
   2% × 3,600 72
   Net Purchase (Invoice) price $3,528

Trade discounts are discounts from catalog or list prices used to establish a pricing policy and, therefore, do not enter into the accounting system. (They are deducted prior to arriving at the invoice price.) Each discount applies to the net price computed after deducting the previous discount. Under the net price method, purchases are recorded net of any cash discount.

33. (b) $527,500.

<table>
<thead>
<tr>
<th></th>
<th>Dec 1994 Inventory @ Base Year Cost</th>
<th>$525,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 1994 Inventory @ Base Year Cost</td>
<td>500,000</td>
<td></td>
</tr>
<tr>
<td>1994 Layer</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>1994 Price index</td>
<td>× 1.10</td>
<td></td>
</tr>
<tr>
<td>1994 Layer @ current (1994) cost</td>
<td>$27,500</td>
<td></td>
</tr>
<tr>
<td>Jan 1994 Base Layer</td>
<td>500,000</td>
<td></td>
</tr>
<tr>
<td>Total inventory Dec 1994</td>
<td>$527,500</td>
<td></td>
</tr>
</tbody>
</table>

34. (c) Original cost. Replacement cost is "market" as it does not exceed the upper limit (net realizable value) and is not less than the lower limit (net realizable value less a normal profit margin). Because original cost is less than "market" (replacement cost), it would be used to value the inventory item.

35. (b) The use of estimated gross profit rates (gross profit method) to determine cost of goods sold for interim reports is appropriate per APB 28 paragraph .14a. However, the method used and any significant adjustments that result from reconciliation with the annual physical inventory should be disclosed. The gross profit method is not appropriate for year end reporting (Per ARB 43 paragraph 4 and statement 4) as it does not provide for a "proper determination of the realized income;" an estimate of cost of goods sold and ending inventory is not adequate. "The inventory at any given date is the balance of cost applicable to goods in hand remaining after the matching of absorbed costs with current revenues—cost for inventory purposes may be determined under any one of several (flow) assumptions—the major objective in selecting a method should be to choose the one which—most clearly reflects periodic income." The gross profit method is inappropriate as it does not provide for the taking or pricing of physical inventory on hand under any flow assumption.

36. (c) The inventory would be valued at $360,000, the “market” (replacement cost) as it is lower than the $400,000 FIFO cost.

Replacement cost, $360,000, is “market” as it is:
   a) not greater than the upper limit, $388,000 net realizable value ($408,000 selling price – $20,000 cost of disposal); and
   b) not less than the lower limit, $328,000 ($388,000 net realizable value – $60,000 normal profit).

37. (c) $244,000. Goods (inventory) out on consignment remain the property of the consignor and must be included in their inventory at cost (including freight charges to transport to the consignee).

<table>
<thead>
<tr>
<th></th>
<th>Current assets as reported $250,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less unrealized profit on consigned goods</td>
</tr>
<tr>
<td></td>
<td>Selling price of consigned goods 26,000</td>
</tr>
<tr>
<td></td>
<td>Cost of consigned goods (26,000 ÷ 1.3) 20,000 (6,000)</td>
</tr>
<tr>
<td></td>
<td>$244,000</td>
</tr>
</tbody>
</table>

3S-6
38. (c) Minimum purchase commitment per year 100,000 units
   Years remaining on contract (3–1 for 1992) \( \times \) 2
   Minimum total commitment under contract 200,000 units
   Probable loss per unit ($0.10 cost per unit – $0.02 scrap value per unit) \( \times \) $0.08
   Loss on purchase commitment $16,000

39. (a)

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases</td>
<td>$60,000</td>
<td>$110,000</td>
</tr>
<tr>
<td>Net additional markup</td>
<td>—</td>
<td>10,000</td>
</tr>
<tr>
<td>Net markdowns</td>
<td>—</td>
<td>(20,000)</td>
</tr>
<tr>
<td>Current period value</td>
<td>$60,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Beginning inventory</td>
<td>30,000</td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>(90,000)</td>
<td></td>
</tr>
<tr>
<td>Ending inventory at retail</td>
<td>$40,000</td>
<td></td>
</tr>
</tbody>
</table>

Current period cost ratio—$60,000 ÷ $100,000 = 60%
Ending inventory at FIFO cost—$40,000 \( \times \) 60% = $24,000

As the method is FIFO (not L.C.M.) net markdowns are included in the cost ratio computation, and the cost ratio computation is made for the current period purchases as it constitutes the ending inventory under the FIFO method.

Note that if the ending inventory at retail were greater than $100,000, a portion of the beginning inventory would be used, and its cost ratio would be used for its costing.

40. (b) When inventory is reported at replacement cost using the lower of cost or market method, replacement cost is "market" and it is less than the original cost. Therefore, statement I is incorrect.

Under the lower of cost of market method, replacement cost is market provided it is less than the net realizable value (upper limit) and greater than net realizable value less a normal profit (lower limit). Therefore, statement II is correct.

41. (d) $1,710,000
    Inventory before adjustments $1,500,000
    Add: Purchase in-transit FOB shipping point 90,000
    Add: Goods not shipped to customers 120,000
    $1,710,000

42. (a) Inventory or inventoriable cost should include all reasonable and necessary costs of preparing inventory for sale. These costs include the purchase price of the inventories, and other costs associated with readying inventories for sale, for example, freight-in.

    Interest, on an inventory loan or otherwise, is a period cost and expensed in the period incurred. Interest is not an inventoriable cost.

43. (b) Under the dollar value LIFO method, inventory items are grouped into "pools" of similar types of material or use for the computation and use of a price index. The other methods listed are all based upon units.
44. (d) Accounts payable before adjustment $900,000
  Add: Goods in transit, FOB shipping point 50,000
  Add: Payments not disbursed 40,000
  $990,000

Title to goods shipped "FOB Shipping Point" transfers to the purchaser at the shipping point when the seller delivers them to a common carrier, which is acting as an agent for the buyer. Such goods, in transit, would be included in the purchaser's inventory and the associated liability included in its accounts payable. Title to goods shipped "FOB Destination" transfers to the purchaser when the goods are delivered to the buyer's destination. Such goods in transit would not be recorded by the purchaser. They are properly included in the seller's inventory.

Recorded checks which are not disbursed (held back) at the end of an accounting period should be included in the cash balance as of that date.

45. (b)

<table>
<thead>
<tr>
<th>Date</th>
<th>@ base yr. cost</th>
<th>@ base yr. cost</th>
<th>Price index</th>
<th>@ current yr. cost</th>
<th>Ending inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/90</td>
<td>$100,000</td>
<td>1.00</td>
<td>100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/31/90</td>
<td>120,000</td>
<td>20,000</td>
<td>1.05</td>
<td>21,000</td>
<td>121,000</td>
</tr>
<tr>
<td>12/31/91</td>
<td>128,000</td>
<td>8,000</td>
<td>1.10</td>
<td>8,800</td>
<td>129,800</td>
</tr>
</tbody>
</table>

NOTE: Ending inventory at 1/1/90 is the "base" and two layers have been added.

46. (a) $545,000 cost of goods sold

Payment to suppliers $490,000
Add: increase in accounts payable
($75,000 – $50,000) 25,000
Purchases $515,000
Add: decrease in inventory
($290,000 – $260,000) 30,000
Cost of goods sold $545,000

47. (a) Price index = Current ending inventory at current yr. cost
Current ending inventory at base yr. cost

48. (d) Net realizable value less a normal profit margin (the lower limit) is "market" as the replacement cost is below this amount. Because "market" (NRV -- normal profit margin) is below the original cost, it would be used to value inventory under the lower of cost or market method.

49. (a) Beginning inventory $500,000
+ Purchases 2,500,000
  Cost of goods available for sale $3,000,000
  - Cost of goods sold ($3,200,000 × 75%*) 2,400,000
  Ending inventory required for 25% gross profit 600,000
  Ending inventory—actual 575,000
  Estimated cost of missing inventory $25,000

*If gross profit (margin) is 25%, then the cost of goods sold is 75% (100% – 25%).

50. (d)

<table>
<thead>
<tr>
<th></th>
<th>At cost</th>
<th>At retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>$147,000</td>
<td>$203,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>833,000</td>
<td>1,155,000</td>
</tr>
<tr>
<td>Additional markups</td>
<td></td>
<td>42,000</td>
</tr>
<tr>
<td></td>
<td>$980,000</td>
<td>$1,400,000</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost/retail ratio</td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>Less: Markdowns</td>
<td>(14,000)</td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>(1,106,000)</td>
<td></td>
</tr>
<tr>
<td>Ending inventory at retail</td>
<td>$280,000</td>
<td></td>
</tr>
<tr>
<td>Ending inventory at cost ($280,000 × 70%)</td>
<td>$196,000</td>
<td></td>
</tr>
</tbody>
</table>
51. (c) Mineral mine $3,600,000
Development cost 1,080,000
Total cost $4,680,000
Less: Estimated residual value (360,000)
Total cost subject to depletion $4,320,000
Depletion per ton = $4,320,000 ÷ 2,160,000 tons = $2 per ton
Depletion expense (included in cost of goods sold) = $2 per ton × 240,000 tons sold = $480,000
NOTE: Depletion included in ending inventory equals $60,000 ($2 per ton × 30,000 tons not sold).

52. (b) Perpetual Inventory:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Units</th>
<th>X</th>
<th>Unit Cost</th>
<th>=</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1</td>
<td>Balance</td>
<td>2,000</td>
<td>x</td>
<td>1</td>
<td>=</td>
<td>2,000</td>
</tr>
<tr>
<td>1/8</td>
<td>Purchase</td>
<td>1,200</td>
<td>x</td>
<td>3</td>
<td>=</td>
<td>3,600</td>
</tr>
<tr>
<td>1/23</td>
<td>Sold</td>
<td>(1,200)</td>
<td>x</td>
<td>3</td>
<td>=</td>
<td>(3,600)</td>
</tr>
<tr>
<td></td>
<td>Sold</td>
<td>(600)</td>
<td>x</td>
<td>1</td>
<td>=</td>
<td>(600)</td>
</tr>
<tr>
<td>1/23</td>
<td>Balance</td>
<td>1,400</td>
<td>x</td>
<td>1</td>
<td>=</td>
<td>1,400</td>
</tr>
<tr>
<td>1/28</td>
<td>Purchase</td>
<td>800</td>
<td>x</td>
<td>5</td>
<td>=</td>
<td>4,000</td>
</tr>
<tr>
<td>1/31</td>
<td>Balance</td>
<td>2,200</td>
<td></td>
<td></td>
<td></td>
<td>5,400</td>
</tr>
</tbody>
</table>

Periodic Inventory Method:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Units</th>
<th>X</th>
<th>Unit Cost</th>
<th>=</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1</td>
<td>Balance</td>
<td>2,000</td>
<td>x</td>
<td>1</td>
<td>=</td>
<td>2,000</td>
</tr>
<tr>
<td>1/8</td>
<td>Purchase</td>
<td>1,200</td>
<td>x</td>
<td>3</td>
<td>=</td>
<td>3,600</td>
</tr>
<tr>
<td>1/28</td>
<td>Purchase</td>
<td>800</td>
<td>x</td>
<td>5</td>
<td>=</td>
<td>4,000</td>
</tr>
<tr>
<td>1/28</td>
<td>Available</td>
<td>4,000</td>
<td></td>
<td></td>
<td></td>
<td>9,600</td>
</tr>
<tr>
<td></td>
<td>Sold</td>
<td>(800)</td>
<td>x</td>
<td>5</td>
<td>=</td>
<td>(4,000)</td>
</tr>
<tr>
<td></td>
<td>Sold</td>
<td>(1,000)</td>
<td>x</td>
<td>3</td>
<td>=</td>
<td>(3,000)</td>
</tr>
<tr>
<td>1/31</td>
<td>Balance</td>
<td>2,000</td>
<td>x</td>
<td>1</td>
<td>=</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Balance</td>
<td>200</td>
<td>x</td>
<td>3</td>
<td>=</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td>Total Balance</td>
<td>2,200</td>
<td></td>
<td></td>
<td></td>
<td>2,600</td>
</tr>
</tbody>
</table>

53. (d) 2001 $40,000 base cost x 2.00 = $80,000 current cost.

54. (a) The FIFO inventory method is the only inventory method in which the periodic and perpetual inventory systems will always result in the same dollar amount for ending inventory and cost of goods sold. The phrase, “during periods of inflation,” is irrelevant in this question.

55. (b) Cost of Goods sold is calculated as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Inventory</td>
<td>$ 30,840</td>
</tr>
<tr>
<td>+Purchases</td>
<td>102,800</td>
</tr>
<tr>
<td>-Purchase Discounts</td>
<td>(10,280)</td>
</tr>
<tr>
<td>Net Purchases</td>
<td>92,520</td>
</tr>
<tr>
<td>+Freight-In</td>
<td>15,420</td>
</tr>
<tr>
<td>Available for Sale</td>
<td>$138,780</td>
</tr>
<tr>
<td>-Ending Inventory</td>
<td>(20,560)</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>$118,220</td>
</tr>
</tbody>
</table>

Note: Freight out is a selling cost and is not a part of cost of goods sold.
56. (c) This is a lower of cost or market question so the first step is to calculate LIFO cost. The company had a beginning inventory of 8,000 units and purchased 12,000 units so available for sale was 20,000 units. Rose sold 10,000 units so the ending inventory was 10,000 units. Since the company is using LIFO, the 10,000 units sold came from the January 5th purchases. Therefore, the ending inventory is as follows:

- **Beg. Inventory**
  - 8,000 units x $8.20 per unit = $65,600
- **Purchases 1/5**
  - 2,000 units x $7.90 per unit = 15,800
- **Total Cost**
  - $81,400

The average unit cost is $81,400/10,000 units = $8.14. Now, the lower cost or market portion of the problem:

**Step #1**: Which is lower; cost or market (Replace.Cost)?
- Cost is $8.14 and Market (Replacement Cost) is $8.00
- Replacement Cost is Lower $8.00

**Step #2**: Does market (Replacement Cost) fall between the ceiling and the floor?
- The ceiling is the net realizable value of $8.80.
- The floor is the ceiling minus a normal profit
  - ($8.80 - $1.00) = $7.80

Since the market is lower than the cost and falls between the ceiling and the floor, the ending inventory should be reported on the balance sheet at the $8.00 market price X 10,000 units for a total carrying value of $80,000.

57. (a) The solutions approach would be to prepare an income statement to calculate the cost of the ending inventory and then take the ending inventory cost and subtract the inventory cost not damaged by the flood to calculate the inventory lost in the flood.

**Step #1**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>250,000</td>
</tr>
<tr>
<td>Less cost of Good Sold</td>
<td></td>
</tr>
<tr>
<td>Inventory, January 1</td>
<td>35,000</td>
</tr>
<tr>
<td>+ Purchases</td>
<td>200,000</td>
</tr>
<tr>
<td>Available for sale</td>
<td>235,000</td>
</tr>
<tr>
<td>Less Ending Inventory</td>
<td>(85,000)*</td>
</tr>
<tr>
<td>= Cost of Goods Sold</td>
<td></td>
</tr>
<tr>
<td>60% x sales</td>
<td>(150,000)</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>100,000</td>
</tr>
</tbody>
</table>

*Ending Inventory:*
- Available for sale ($235,000) – Cost of Goods sold ($150,000) = **$85,000**

**Step #2**—Calculate the Inventory lost in the flood

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ending Inventory on books – Step #1</td>
<td>$85,000</td>
</tr>
<tr>
<td>– Inventory not damaged by flood</td>
<td>(30,000)</td>
</tr>
<tr>
<td>Inventory lost in flood</td>
<td>$55,000</td>
</tr>
</tbody>
</table>

58. (b) The total cost of the consigned inventory was $20,000. The problem states that 70% of the inventory was sold so Nomar should still have 30% of the inventory on its books. The ending inventory should be $20,000 x 30% = $6,000.

Note: The advertising and commission costs are expense and not a part of the cost of the inventory. If Nomar had incurred transportation to ship the inventory to the consignee, the transportation cost would be part of the cost of the consigned inventory.
59. (c) The solutions approach is to calculate the total cost of the mine less the sales value of the property at the end of its useful life divided by the estimated tons to be extracted to calculate the depletion portion.

<table>
<thead>
<tr>
<th>Total Cost</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Price</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>plus Preparation Cost</td>
<td>500,000</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>less sales price of property</td>
<td>(100,000)</td>
</tr>
<tr>
<td>Net total cost</td>
<td>$2,400,000</td>
</tr>
<tr>
<td>Divided by estimated tons extracted</td>
<td>750,000 ton</td>
</tr>
<tr>
<td>= Depletion per ton</td>
<td>$ 3.20</td>
</tr>
</tbody>
</table>

60. (b)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1 Beginning Inventory</td>
<td>10,000 units x $3 = $30,000</td>
</tr>
<tr>
<td>1/5 Purchase</td>
<td>5,000 units x $4 = 20,000</td>
</tr>
<tr>
<td>1/15 Purchase</td>
<td>5,000 units x $5 = 25,000</td>
</tr>
<tr>
<td>1/15 Available for Sale</td>
<td>20,000 units x $3.75* = 75,000</td>
</tr>
<tr>
<td>1/20 Cost of Goods Sold (10,000)</td>
<td>x $3.75 = (37,500)</td>
</tr>
<tr>
<td>Ending Inventory</td>
<td>10,000 x $3.75 = $37,500</td>
</tr>
</tbody>
</table>

*Weighted Average = Available for Sale Dollars = $75,000 = 3.75 per unit
Cost per unit Available for Sale Units 20,000 units

61. (a). For example, XYZ Corp. entered into a purchase commitment in year 1 to purchase 100,000 pounds of cocoa beans on March 31, year 2 at $2.00 per pound. If the price of cocoa beans on December 31, Year 1 dropped to $1.90 per pound, conservatism dictates that XYZ recognize a $.10 per pound loss and create a liability for the loss.

62. (d). Inventory cost includes all necessary cost to purchase the inventory and get it ready to sell. All the cost in the problem are necessary and the answer if $4,925.

63. (b). This is a lower of cost or market inventory problem. The cost is $258,000 and the market (replacement cost) is $230,000 so the lower of the two is market of $230,000, but the “market” cannot go below the floor. The floor is the sales price of $275,000 less the disposal cost of $14,000 less a normal profit $10,000 for a net floor amount of $251,000. The answer is the floor which is the lowest number possible. If you remember the short-cut, the answer is the number in the middle. Cost $258,000 Floor $251,000 and the market of $230,000.

64. (c). The shipping costs of $1.5 million from overseas are necessary costs to purchase the inventory and would be capitalized as a part of the cost of inventory. Since the ending inventory represents 25% of total purchases ($3.0 million vs. $12.0 million) the ending inventory would include 25% of the total $1.5 million shipping cost or 375,000. The shipping costs to export customers are selling out.

65. (a) FIFO matches old Inventory cost (lower in a period of rising prices) with current sales prices so FIFO would maximize profits. Average cost methods by definition would include cost and profits between FIFO and LIFO. A LIFO cost method would match the most current cost (highest in a period of rising prices) to current sales so the profits would be the lowest of the four methods.

66. (c) LIFO is not acceptable under IFRS.
67. (b) FIFO and specific identification
LIFO is not acceptable under IFRS and all answers which include LIFO are incorrect. Dollar value life would not be acceptable under IFRS.

68. (a) Biological inventory items are reported at the fair value less the cost to sell at the point of harvest.

69. (d) IFRS does not allow inventory to be reported at fair value.

70. (c) The lower of cost of market would be the cost of $95,000 compared to the net realizable value of $93,000. The lower of the two, $93,000, would be the answer. Note that the lower of lost or market may be applied to units, groups or the total under IFRS. This is similar to the rules in the U.S.

71. (a) Since the cost of $5.00 is lower than the net realizable value $5.25, ABC would report the cost of $5.00.

72. (b) Since the net realizable value of $9.50 is lower than the cost of $10.00 XYZ would report $9.50 on the balance sheet and recognize a $.50 loss on the income statement.

73. (a) Since the inventory cost of $10.00 is now less than the net realizable value of $10.25, XYZ would report the $10.00 on the balance sheet. Since the inventory was written down and a lost of $.50 recognized in Year 1, the inventory in Year 2 must be restored to its original cost of $10.00 and a $.50 recovery on inventory valuation (gain) recognized on the income statement.
Chapter Three
Solutions to Inventories Problems

NUMBER 1

The Jericho Variety Store
LIFO RETAIL COMPUTATION
December 31, 19X5

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases</td>
<td>$120,000</td>
<td>$172,000</td>
</tr>
<tr>
<td>Freight-in</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Net markups</td>
<td>40,000</td>
<td></td>
</tr>
<tr>
<td>Net markdowns</td>
<td>(12,000)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$140,000</td>
<td>200,000</td>
</tr>
</tbody>
</table>

Cost ratio ($140,000 ÷ $200,000) 70%

Sales 190,000

19X5 layer:
At retail 10,000
At cost ($10,000 × 70%) $7,000

Inventory, January 1, 19X5 (base) $29,000

Inventory, December 31, 19X5 $36,000

NUMBER 2

Part a.

1. Frate Company

COMPUTATION OF INVENTORY FOR PRODUCT PLY UNDER FIFO INVENTORY METHOD
March 31, 19X9

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units</td>
<td>cost</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March 26, 19X9</td>
<td>900</td>
<td>$11.50</td>
</tr>
<tr>
<td>February 16, 19X9</td>
<td>600</td>
<td>11.00</td>
</tr>
<tr>
<td>January 25, 19X9 (portion)</td>
<td>100</td>
<td>10.50</td>
</tr>
<tr>
<td>March 31, 19X9 (inventory)</td>
<td>1,600</td>
<td></td>
</tr>
</tbody>
</table>

2. Frate Company

COMPUTATION OF INVENTORY FOR PRODUCT PLY UNDER LIFO INVENTORY METHOD
March 31, 19X9

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units</td>
<td>cost</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning inventory</td>
<td>800</td>
<td>$9.00</td>
</tr>
<tr>
<td>January 5, 19X9 (portion)</td>
<td>800</td>
<td>10.00</td>
</tr>
<tr>
<td>March 31, 19X9, inventory</td>
<td>1,600</td>
<td></td>
</tr>
</tbody>
</table>
3.

**Frate Company**

**COMPUTATION OF INVENTORY FOR PRODUCT PLY UNDER WEIGHTED AVERAGE INVENTORY METHOD**

*March 31, 19X9*

<table>
<thead>
<tr>
<th>Units</th>
<th>Total</th>
<th>Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units</td>
<td>cost</td>
<td>cost</td>
<td></td>
</tr>
<tr>
<td>Beginning inventory</td>
<td>800</td>
<td>$ 9.00</td>
<td>$ 7,200</td>
</tr>
<tr>
<td>January 5, 19X9</td>
<td>1,500</td>
<td>10.00</td>
<td>15,000</td>
</tr>
<tr>
<td>January 25, 19X9</td>
<td>1,200</td>
<td>10.50</td>
<td>12,600</td>
</tr>
<tr>
<td>February 16, 19X9</td>
<td>600</td>
<td>11.00</td>
<td>6,600</td>
</tr>
<tr>
<td>March 26, 19X9</td>
<td>900</td>
<td>11.50</td>
<td>10,350</td>
</tr>
<tr>
<td><strong>5,000</strong></td>
<td><strong>$51,750</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Weighted average cost ($51,750 ÷ 5,000) = $10.35

March 31, 19X9, inventory = 1,600 $10.35 = $16,560

**Part b.**

**Red Department Store**

**COMPUTATION OF ESTIMATED INVENTORY USING RETAIL INVENTORY METHOD**

*December 31, 19X8*

<table>
<thead>
<tr>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory at January 1, 19X8</td>
<td>$ 32,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>270,000</td>
</tr>
<tr>
<td>Freight in</td>
<td>7,600</td>
</tr>
<tr>
<td>Net markups (60,000 – 10,000)</td>
<td></td>
</tr>
<tr>
<td>Goods available for sale</td>
<td>$309,600</td>
</tr>
</tbody>
</table>

Cost ratio ($309,600 ÷ $720,000) = 43%

Sales = 600,000

Net markdowns (25,000 – 5,000) = 20,000

Estimated normal shrinkage = 12,000

Estimated inventory at retail at December 31, 19X8 = 632,000

Estimated inventory at December 31, 19X8, lower of cost or market (88,000 x 43%) = $ 37,840

**Part c.**

**Hodge Company**

**CALCULATION OF ESTIMATED LOSS ON INVENTORY IN THE FIRE USING GROSS MARGIN (PROFIT) METHOD**

*November 21, 19X8*

| Inventory at November 1, 19X8 | $100,000 |
| Purchases from November 1, 19X8 to date of fire | 140,000 |
| Cost of goods available for sale | 240,000 |

Estimated cost of goods sold

Net sales from Nov. 1, 19X8 to date of fire = $220,000

Less estimated gross margin (profit) = 66,000

($220,000 x 30%) = 154,000

Estimated cost of inventory at date of fire = 86,000

Less salvage goods = 10,000

Estimated loss on inventory in the fire = $ 76,000
NUMBER 3

a. 1. When LIFO is applied to units of product, the total inventory value is determined by pricing individual items within the inventory. This forms the base layer of the LIFO inventory. When there is an increase in the number of any given unit in the inventory at the end of a period, it is theoretically consistent to value the increase as if it occurred as early in the period as possible. In other words, if the volume of the first purchase of the period exceeds the amount of increase in units, the increase is added to the beginning inventory priced at the unit cost of the first purchase. If the size of the increase exceeds the volume of the first purchase, then the entire cost of the first purchase plus sufficient units priced at the unit cost of the next purchase would be used, etc. In practice, however, the increase is sometimes priced at either the most recent purchase cost or at the average cost for the year. However priced, the increased units represent a new layer of the inventory. Decreases in inventory quantities are removed from the inventory layers in the reverse order of additions.

2. The dollar-value method is applied to a retail LIFO inventory and to LIFO units of product utilizes a number of procedures in common. At the time of adoption of either application, inventory consists of a base pool (or group of pools) to which is assigned a dollar value that is an inherent element of all subsequent inventory amounts, unless a reduction below the original inventory level is sustained. An important element of establishing the pool is segmentation of the inventory into appropriate classes or homogeneous groupings (i.e., similar markups or goods sold to the same type of customer for the same general purpose). It is also essential to compute or ascertain an index value of relevant prices at the time these applications are adopted. Subsequent increments or increases above the basic inventory level are valued through the use of related price-index values. The base-year price index is used in comparison with the current price index prevailing when the inventory increase occurs to determine how much of an apparent change is solely due to price changes and how much represents an actual change in the volume of the inventory. Volume increases (new layers) are then added to the basic inventory at price levels actually prevailing when the physical increases took place. If a decrease should occur in a later period after there has been a succession of increases above the basic inventory, the most recent layers added are the first layers presumed to have been sold or consumed.

b. The pool concept of the dollar-value LIFO applications discussed above makes it unnecessary to match opening and closing quantities of individual items, thereby simplifying recordkeeping. This advantage is limited by the necessity to maintain appropriate classes of inventory within the particular pool, but this is less cumbersome than accounting for individual items of inventory. Under these applications, changes in the specific types of goods making up a particular inventory classification do not affect total inventory pricing unless such changes result in an increase in ending inventory priced at base-year prices. Thus, continuous substitution of new elements of inventory may have little or no effect on the total inventory amount. This is in some contrast with what would occur under a LIFO system maintained strictly on a unit basis where the new units would come into inventory at substantially higher values when prices were rising.

c. The advantage usually cited for the LIFO method and its applications is that it does match current costs against current revenues. Stated another way, its usage, when prices are rising, results in the highest costs being matched against current revenue; conversely, when prices are falling, the lowest costs are matched against current revenue. This minimizes recognition of profits or losses from mere fluctuations in the value of inventories which an entity must continue to hold if it is to remain a going concern. A second advantage of the method is that it provides a better measure of disposable income. Under other methods which, given parallel conditions, would show higher amounts of ending inventory and hence correspondingly higher amounts of income, the income is not as good an indication of the amount that is disposable. Additional investment (perhaps from retained earnings) in inventory must be made if the same quantity is to be maintained on hand. A third advantage of the method is that in conditions of rising prices it tends to give lower inventory valuations. In the event these valuations are accepted for property-tax-valuation purposes there would be an attendant tax saving.

The principal disadvantage concerns the valuation of the inventory for balance-sheet purposes. As more time elapses from the date of adoption of the method, the value reflected on the balance sheet grows more out-of-date. This would mean that if prices changed much over the interval from the date of adoption to the date of the current balance sheet, the balance-sheet value would be somewhat meaningless. Further, LIFO permits a deferral in
recognition of gains or losses from the holding of inventories when prices of specific goods are changing at rates different than the rate of prices generally. This has also been criticized as a secret reserve.

Some object to LIFO because it seldom accords with the physical flow of goods. This can be countered by noting that it is said to represent a flow of costs, not a physical flow, but the inconsistency is still there and does not rest easily with some theorists.

The company to company differences in pricing of various layers, because of differences in the timing of adding those layers, may cause significant distortions of comparability even among LIFO companies.

It is possible to manipulate net income to some degree under LIFO simply by refraining from buying or by resorting to heavy buying near the end of an accounting period. Under other flow methods this is not possible and such actions would be reflected simply as inventory variations rather than as variations in cost of goods sold.

In the event inventories are reduced below the level when LIFO was adopted, assuming substantial intervening price rises, the long-term cumulative benefit of having been under such a method can be wiped out in a single period. Ancient costs would be matched against current revenues and highly distorted results would ensue.

While some see the matching of current costs against current revenues as a major advantage of LIFO, others contend that this is a means of achieving an artificial smoothing of income.

NUMBER 4

a. Purchases from various suppliers generally should be included in Huddell's inventory when Huddell receives the goods. Title to goods purchased FOB destination is assumed to pass when the goods are received.

b. Huddell should account for the warehousing costs as additional cost of inventory. All necessary and reasonable costs of readying goods for sale should be included in inventory.

c. 1. The advantages of using the dollar value LIFO method are to reduce the cost of accounting for inventory and to minimize the probability of reporting the liquidation of LIFO inventory layers.

2. The application of dollar value LIFO is based on dollars of inventory, an inventory cost index for each year, and broad inventory pools. The inventory layers are identified with the inventory cost index for the year in which the layer was added. In contrast, traditional LIFO is applied to individual units at their cost.

d. 1. Huddell's net markups should be included only in the retail amounts (denominator) to determine the cost to retail percentage.

Huddell's net markdowns should be ignored in the calculation of the cost to retail percentage.

2. By not deducting net markdowns from the retail amounts to determine the cost to retail percentage, Huddell produces a lower cost to retail percentage than would result if net markdowns were deducted. Applying this lower percentage to ending inventory at retail, the inventory is reported at an amount below cost. This amount is intended to approximate lower of average cost or market.
NUMBER 5

Acute Company

COMPUTATION OF INVENTORIES UNDER THE DOLLAR-VALUE LIFO INVENTORY METHOD

<table>
<thead>
<tr>
<th>Year ended December 31</th>
<th>Inventory at respective year-end prices</th>
<th>External price index (base year 19X5)</th>
<th>Inventory at base year (19X5) price</th>
</tr>
</thead>
<tbody>
<tr>
<td>19X6</td>
<td>$363,000</td>
<td>1.10</td>
<td>$330,000</td>
</tr>
<tr>
<td>19X7</td>
<td>$420,000</td>
<td>1.20</td>
<td>$350,000</td>
</tr>
<tr>
<td>19X8</td>
<td>$430,000</td>
<td>1.25</td>
<td>$344,000</td>
</tr>
</tbody>
</table>

**December 31, 19X6**
Base $300,000
19X6 layer at 19X6 cost: ($330,000 – $300,000 = $30,000 × 1.10) 33,000
$333,000

**December 31, 19X7**
Base $300,000
19X6 layer at 19X6 cost 33,000
19X7 layer at 19X7 cost: ($350,000 – $330,000 = $20,000 × 1.20) 24,000
$357,000

**December 31, 19X8**
Base $300,000
19X6 layer at 19X6 cost 33,000
19X7 layer at 19X7 cost:
($344,000 – $350,000 = ($6,000) + $20,000 = $14,000 × 1.20) 16,800
$349,800

NUMBER 6

a. If the terms of the purchase are FOB shipping point (manufacturer's plant), Retail, Inc., should include in its inventory goods purchased from its suppliers when the goods are shipped. For accounting purposes, title is presumed to pass at that time.

b. Freight-in expenditures should be considered an inventoriable cost because they are part of the price paid or the consideration given to acquire an asset.

c. Because the cooking utensils were purchased three times during the current year, each time at a higher price than previously, Retail, Inc.'s ending inventory would be lower and the cost of goods sold would be higher using the weighted-average cost method instead of the FIFO method.

d. Because Retail, Inc., calculates the estimated cost of its ending inventory using the conventional (lower-of-cost-or-market) retail inventory method, net markdowns are excluded from the computation of the cost ratio and included in the computation of the ending inventory at retail. Net markdowns are excluded in order to approximate a lower-of-cost-or-market valuation. Excluding net markdowns from the computation of the cost ratio reduces the cost ratio, which in turn reduces the estimated cost of the ending inventory.

e. Products on consignment represent inventories owned by Retail, Inc., which are physically transferred to The Mall Space Company. Retail, Inc., retains title to the goods until their sale by The Mall Space Company. The goods consigned are still included by Retail, Inc., in the inventory section of its balance sheet. Retail, Inc., reclassifies the inventory from regular inventory to consigned inventory. The Mall Space Company, on the other hand, reports neither inventory nor a liability in its balance sheet.
NUMBER 7

a. 1. The specific identification method requires each unit to be clearly distinguished from similar units either by description, identification number, location, or other characteristic. Costs are accumulated for specific units and expensed as the units are sold. Thus, the specific identification method results in recognized cost flows being identical to actual physical flows. Ideally, each unit is relatively expensive and the number of such units relatively few so that recording of costs is not burdensome. Under the specific identification method, if similar items have different costs, cost of goods sold is influenced by the specific units sold.

2. It is appropriate for Happlia to use the specific identification method because each appliance is expensive, and easily identified by number and description. The specific identification method is feasible because Happlia already maintains records of its units held by individual retailers. Management's ability to manipulate cost of goods sold is minimized because once the inventory is in retailer's hands Happlia's management cannot influence the units selected for sales.

b. 1. Happlia should include in inventory carrying amounts all necessary and reasonable costs to get an appliance into a useful condition and place for sale. Common (or joint) costs should be allocated to individual units. Such costs exclude the excess costs incurred in transporting refrigerators to Minneapolis and their reshipment to Kansas City. These unit costs should only include normal freight costs from Des Moines to Kansas City. In addition, costs incurred to provide time utility to the goods, i.e., ensuring that they are available when required, will also be included in inventory carrying amounts.

2. Examples of inventoriable costs include the unit invoice price, plus an allocated proportion of the port handling fees, import duties, freight costs to Des Moines and to retailers, insurance costs, repackaging, and warehousing costs.

c. The 1990 income statement should report in cost of goods sold all inventory costs related to units sold in 1990, regardless of when cash is received from retailers. Excess freight costs incurred for shipping the refrigerators from Minneapolis to Kansas City should be included in determining operating income.

NUMBER 8

a. 1. For its 1993 models, Blaedon should include in inventory carrying amounts all necessary and reasonable costs. These costs may include design costs, purchase price from contractors, freight-in, and warehousing costs.

2. Blaedon’s 1992 model inventory should be assigned a carrying amount equal to its net realizable value, which is its current list price reduced by both its disposition costs and two-thirds of the difference between the $40 allowance given and the carrying amount assigned to trade-ins. The trade-ins’ carrying amount should equal the $25 average net realizable value less the profit margin, if any, assigned.

b. 1. Using FIFO, Blaedon would assign the earliest lawn mower costs to cost of goods sold. With rising costs, this would result in matching old, relatively low inventory costs against current revenues. Net income would be higher than that reported using certain other inventory methods.

2. Blaedon would assign the latest costs to ending inventory. Normally, the carrying amount of Blaedon’s FIFO ending inventory would approximate replacement cost at December 31, 1992. Retained earnings would be higher than that reported using certain other inventory methods.
NUMBER 9

a. 1. Cash discounts should not be accounted for as financial income when payments are made. Income should be recognized when the earning process is complete (when Taylor sells the inventory). Furthermore, cash discounts should not be recorded when the payments are made because in order to properly match a cash discount with the related purchase, the cash discount should be recorded when the related purchase is recorded.

2. Cash discounts should not be accounted for as a reduction of cost of goods sold for period when payments are made. Cost of goods sold should be reduced when the earning process is complete (when Taylor sells the inventory which has been reduced by the cash discounts). Furthermore, cash discounts should not be recorded when the payments are made because in order to properly match a cash discount with the related purchase, the cash discount should be recorded when the related purchase is recorded.

3. Cash discounts should be accounted for as a direct reduction of purchase cost because they reduce the cost of the inventories. Purchases should be recorded net of cash discount to reflect the net cash to be paid. The primary basis of accounting for inventories is cost, which represents the price paid or consideration given to acquire an asset.

b. Inventories would be lower using the LIFO inventory method instead of the FIFO method over a substantial time period when purchase prices of household appliances are rising because the inventories are at the oldest (lower) purchase prices instead of the most recent (higher) purchase prices. Correspondingly, cost of goods sold would be higher because the cost of goods sold is at more recent (higher) purchase prices instead of older (lower) purchase prices. Consequently, net income and retained earnings would be lower.

More cash flow would generally be available using the LIFO inventory method instead of the FIFO method because taxable income is decreased, resulting generally in accrual and payment of lower income taxes. Correspondingly, income tax expense would generally be lower.

c. The lower of cost-or-market rule is used for valuing inventories when the FIFO method is used because of (a) the matching principle, that is, the decline in the utility of the household appliances inventories below its cost should be recognized as a loss in the current period, and (b) the concept of balance sheet conservatism.

NUMBER 10

a. Inventory cost should include all reasonable and necessary costs of preparing inventory for sale. These costs include not only the purchase price of the inventories, but also other costs associated with readying inventories for sale.

b. The lower of cost or market rule produces a realistic estimate of future cash flows to be realized from the sale of inventories. This is consistent with the principle of conservatism, and recognizes (matches) the anticipated loss in the income statement in the period in which the price decline occurs.

c. Steel's inventories should be reported on the balance sheet at market. According to the lower of cost or market rule, market is defined as replacement cost. Market cannot exceed net realizable value and cannot be less than net realizable value less the normal profit margin. In this instance, replacement cost is between net realizable value and net realizable value less the normal profit margin. Therefore, market is established as replacement cost. Since market is less than original cost, inventory should be reported at market.

d. Ending inventories and net income would have been the same under either lower of average cost or market or lower of FIFO cost or market. In periods of declining prices, the lower of cost or market rule results in a write-down of inventory cost to market under both methods, resulting in the same inventory cost. Therefore, net income using either inventory method is the same.
NUMBER 11

a.

York Co.
Schedule of Cost of Goods Sold
For the Year Ended December 31, 1993

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>$ 65,600</td>
</tr>
<tr>
<td>Add: Purchases</td>
<td>368,900</td>
</tr>
<tr>
<td>Less: Purchase discounts</td>
<td>(18,000)</td>
</tr>
<tr>
<td>Add: Freight-in</td>
<td>5,000</td>
</tr>
<tr>
<td>Goods available for sale</td>
<td>421,500</td>
</tr>
<tr>
<td>Less: Ending inventory</td>
<td>(176,000) [1]</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>$245,500</td>
</tr>
</tbody>
</table>

York Co.
Supporting Schedule of Ending Inventory
December 31, 1993

Inventory at cost (LIFO):

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Cost per unit</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory, January 1</td>
<td>8,000</td>
<td>$8.20</td>
<td>$65,600</td>
</tr>
<tr>
<td>Purchases, quarter ended March 31</td>
<td>12,000</td>
<td>8.25</td>
<td>99,000</td>
</tr>
<tr>
<td>Purchases, quarter ended June 30</td>
<td>2,000</td>
<td>7.90</td>
<td>15,800</td>
</tr>
<tr>
<td></td>
<td>22,000</td>
<td></td>
<td>$180,400</td>
</tr>
</tbody>
</table>

[1] Inventory at market:
22,000 units @ $8 = $176,000

b. Inventory should be valued at the lower of cost or market. Market means current replacement cost, except that:

(1) Market should not exceed the net realizable value; and
(2) Market should not be less than net realizable value reduced by an allowance for an approximately normal profit margin.

In this situation, because replacement cost ($8 per unit) is less than net realizable value, but greater than net realizable value reduced by a normal profit margin, replacement cost is used as market. Because inventory valued at market ($176,000) is lower than inventory valued at cost ($180,400), inventory should be reported in the financial statements at market.
Chapter 3 Simulation Exercise

This problem consists of four unrelated parts.

Part a. The Frate Company was formed on December 1, 19X8. The following information is available from Frate's inventory records for Product Ply:

<table>
<thead>
<tr>
<th>Units</th>
<th>Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 19X9 (beginning inventory)</td>
<td>800</td>
</tr>
<tr>
<td>Purchases:</td>
<td></td>
</tr>
<tr>
<td>January 5, 19X9</td>
<td>1,500</td>
</tr>
<tr>
<td>January 25, 19X9</td>
<td>1,200</td>
</tr>
<tr>
<td>February 16, 19X9</td>
<td>600</td>
</tr>
<tr>
<td>March 26, 19X9</td>
<td>900</td>
</tr>
</tbody>
</table>

A physical inventory on March 31, 19X9, shows 1,600 units on hand.

Required: Prepare schedules to compute the ending inventory at March 31, 19X9, under each of the following inventory methods:

1. FIFO.
2. LIFO.
3. Weighted average.

Show supporting computations in good form.

Part b. The Red Department Store uses the retail inventory method. Information relating to the computation of the inventory at December 31, 19X8, is as follows:

<table>
<thead>
<tr>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory at January 1, 19X8</td>
<td>$ 32,000</td>
</tr>
<tr>
<td>Sales</td>
<td>600,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>270,000</td>
</tr>
<tr>
<td>Freight in</td>
<td>7,600</td>
</tr>
<tr>
<td>Markups</td>
<td>60,000</td>
</tr>
<tr>
<td>Markup cancellations</td>
<td>10,000</td>
</tr>
<tr>
<td>Markdowns</td>
<td>25,000</td>
</tr>
<tr>
<td>Markdown cancellations</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Estimated normal shrinkage is 2% of sales.

Required: Prepare a schedule to calculate the estimated ending inventory at the lower of average cost or market at December 31, 19X8, using the retail inventory method. Show supporting computations in good form.
**Part c.** On November 21, 19X8, a fire at Hodge Company's warehouse caused severe damage to its entire inventory of Product Tex. Hodge estimates that all usable damaged goods can be sold for $10,000. The following information was available from Hodge's accounting records for Product Tex:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory at November 1, 19X8</td>
<td>$100,000</td>
</tr>
<tr>
<td>Purchases from November 1, 19X8, to date of fire</td>
<td>140,000</td>
</tr>
<tr>
<td>Net sales from November 1, 19X8, to date of fire</td>
<td>220,000</td>
</tr>
</tbody>
</table>

Based on recent history, Hodge had a gross margin (profit) on Product Tex of 30% of net sales.

**Required:**
Prepare a schedule to calculate the estimated loss on the inventory in the fire, using the gross margin (profit) method. Show supporting computations in good form.

**Part d.** Steel Company, a wholesaler that has been in business for two years, purchases its inventories from various suppliers. During the two years, each purchase has been at a lower price than the previous purchase.

Steel uses the lower of FIFO cost or market method to value inventories. The original cost of the inventories is above replacement cost and below the net realizable value. The net realizable value less the normal profit margin is below the replacement cost.

**Required:**

a. In general, what criteria should be used to determine which costs should be included in inventory?
b. In general, why is the lower of cost or market rule used to report inventory?
c. At what amount should Steel's inventories be reported on the balance sheet? Explain the application of the lower of cost or market rule in this situation.
Chapter 3 Simulation Solution

Part a.

1. Frate Company

COMPUTATION OF INVENTORY FOR PRODUCT PLY UNDER FIFO INVENTORY METHOD
March 31, 19X9

<table>
<thead>
<tr>
<th>Units</th>
<th>Unit cost</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 26, 19X9</td>
<td>900</td>
<td>$11.50</td>
</tr>
<tr>
<td>February 16, 19X9</td>
<td>600</td>
<td>11.00</td>
</tr>
<tr>
<td>January 25, 19X9 (portion)</td>
<td>100</td>
<td>10.50</td>
</tr>
<tr>
<td>March 31, 19X9 (inventory)</td>
<td>1,600</td>
<td></td>
</tr>
</tbody>
</table>

2. Frate Company

COMPUTATION OF INVENTORY FOR PRODUCT PLY UNDER LIFO INVENTORY METHOD
March 31, 19X9

<table>
<thead>
<tr>
<th>Units</th>
<th>Unit cost</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>800</td>
<td>$9.00</td>
</tr>
<tr>
<td>January 5, 19X9 (portion)</td>
<td>800</td>
<td>10.00</td>
</tr>
<tr>
<td>March 31, 19X9, inventory</td>
<td>1,600</td>
<td></td>
</tr>
</tbody>
</table>

3. Frate Company

COMPUTATION OF INVENTORY FOR PRODUCT PLY UNDER WEIGHTED AVERAGE INVENTORY METHOD
March 31, 19X9

<table>
<thead>
<tr>
<th>Units</th>
<th>Unit cost</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>800</td>
<td>$9.00</td>
</tr>
<tr>
<td>January 5, 19X9</td>
<td>1,500</td>
<td>10.00</td>
</tr>
<tr>
<td>January 25, 19X9</td>
<td>1,200</td>
<td>10.50</td>
</tr>
<tr>
<td>February 16, 19X9</td>
<td>600</td>
<td>11.00</td>
</tr>
<tr>
<td>March 26, 19X9</td>
<td>900</td>
<td>11.50</td>
</tr>
<tr>
<td>5,000</td>
<td></td>
<td>$51,750</td>
</tr>
</tbody>
</table>

Weighted average cost ($51,750 ÷ 5,000) $10.35

March 31, 19X9, inventory | 1,600 | $10.35 | $16,560 |
Part b.

Red Department Store

COMPUTATION OF ESTIMATED INVENTORY USING RETAIL INVENTORY METHOD

December 31, 19X8

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory at January 1, 19X8</td>
<td>$32,000</td>
<td>$80,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>270,000</td>
<td>590,000</td>
</tr>
<tr>
<td>Freight in</td>
<td>7,600</td>
<td></td>
</tr>
<tr>
<td>Net markups (60,000 – 10,000)</td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td>Goods available for sale</td>
<td>$309,600</td>
<td>720,000</td>
</tr>
</tbody>
</table>

Cost ratio ($309,600 ÷ $720,000) 43%

Sales 600,000
Net markdowns (25,000 – 5,000) 20,000
Estimated normal shrinkage (2% × 600,000) 12,000

Estimated inventory at retail at December 31, 19X8 $88,000

Estimated inventory at December 31, 19X8, lower of cost or market (88,000 × 43%) $37,840

Part c.

Hodge Company

CALCULATION OF ESTIMATED LOSS ON INVENTORY IN THE FIRE USING GROSS MARGIN (PROFIT) METHOD

November 21, 19X8

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory at November 1, 19X8</td>
<td>$100,000</td>
<td></td>
</tr>
<tr>
<td>Purchases from November 1, 19X8 to date of fire</td>
<td>140,000</td>
<td>240,000</td>
</tr>
<tr>
<td>Cost of goods available for sale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated cost of goods sold</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net sales from Nov. 1, 19X8 to date of fire</td>
<td>$220,000</td>
<td></td>
</tr>
<tr>
<td>Less estimated gross margin (profit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>($220,000 × 30%)</td>
<td>66,000</td>
<td>154,000</td>
</tr>
<tr>
<td>Estimated cost of inventory at date of fire</td>
<td></td>
<td>86,000</td>
</tr>
<tr>
<td>Less salvage goods</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>Estimated loss on inventory in the fire</td>
<td></td>
<td>$76,000</td>
</tr>
</tbody>
</table>

Part d.

a. Inventory cost should include all reasonable and necessary costs of preparing inventory for sale. These costs include not only the purchase price of the inventories, but also other costs associated with readying inventories for sale.

b. The lower of cost or market rule produces a realistic estimate of future cash flows to be realized from the sale of inventories. This is consistent with the principle of conservatism, and recognizes (matches) the anticipated loss in the income statement in the period in which the price decline occurs.

c. Steel's inventories should be reported on the balance sheet at market. According to the lower of cost or market rule, market is defined as replacement cost. Market cannot exceed net realizable value and cannot be less than net realizable value less the normal profit margin. In this instance, replacement cost is between net realizable value and net realizable value less the normal profit margin. Therefore, market is established as replacement cost. Since market is less than original cost, inventory should be reported at market.
Chapter Four
Consolidated Financial Statements

FASB Accounting Standards Codification

The FASB Accounting Standards Codification (ASC) topics used in this chapter are ASC323 on the Equity Method, ASC350 on Intangibles, ASC805 on Business Combinations, and ASC810 on Consolidation.

As a prelude to the study of consolidations, it is helpful to look at the terminology involved and the methods for accounting for investments in common stock.

Terminology

Normally for investments in which the investor does not have control, the investor is called the investor and the company invested in is called the investee. In situations in which the investor has control, the investor is called the parent and the company invested in is called the subsidiary.

Methods of Accounting for Investments in Common Stock

<table>
<thead>
<tr>
<th>Percent of Common Stock Owned</th>
<th>Level of Influence</th>
<th>Valuation of Investment</th>
<th>Balance Sheet Presentation</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>Lacks significant</td>
<td>Cost/Fair Value</td>
<td>Investment</td>
<td>Dividends</td>
</tr>
<tr>
<td>20 - 50</td>
<td>Significant</td>
<td>Equity</td>
<td>Investment</td>
<td>% share</td>
</tr>
<tr>
<td>&gt;50</td>
<td>Control</td>
<td>Either</td>
<td>Eliminate in consolidation</td>
<td>Eliminate in consolidation</td>
</tr>
</tbody>
</table>

Investments in Common Stock – Cost vs Equity Methods

As noted on the chart, the parent company may use either the cost or equity method for recording the investment in the subsidiary because the investment account is eliminated in consolidation and does not appear on the consolidated balance sheet. Dividend revenue recorded by the parent on the cost method or equity in subsidiary’s income recorded by the parent is also eliminated by the consolidation process. Candidates should know the mechanics of both methods to understand the eliminating entries on the consolidation worksheet.

Cost Method

In using the chart, please note that it states that if the investor owns less than a 20% interest in the common stock of the investee, the cost method is used. This is a guide, not a rule. The rule is that the investor lacks significant influence. For example, ABC owns 15% of XYZ. ABC is the largest stockholder in XYZ and ABC’s officers are a majority of the board-of-directors of XYZ. These two items give ABC significant influence in the operations of XYZ; therefore the investment would be recorded using the equity method instead of the cost method even though the ownership interest of 15% is less than the 20% guide indicated by the chart.

In reality, many of these investments in which the investor has no significant influence are reported at fair value, not cost. In Chapter 2, fair value is required if the investments in common stock of the investee meets the definition of a marketable equity security. In Chapter 7, under ASC 820 the company has the option of reporting the investment at fair value. However, if the investment does not meet the definition of a marketable equity security or the fair value option is not used, the investment should be recorded at cost.

Note: The emphasis on the cost method in this chapter is because it is used in consolidations.

Author’s Note: In the following examples, I will use the term investee because most of my illustrations will use investments below 50%. If the examples included investments above 50%, I would use the term subsidiary.

Journal Entries for the Cost Method

A. JE To record the acquisition at cost
   JE Investment investee (cost)        XX
   Cash                               XX

B. To record the investor’s share of the investee’s cash dividend
   JE Cash                               XX
   Dividend Revenue                      XX

Note: The receipt of a stock dividend from the investee does not change the total cost of the investment and is not dividend revenue. The stock dividend simply changes the average cost per share (basis) and is recorded using a (memo) entry.
Equity Basis

The chart indicates that an investment in the common stock of another company that gives the investor significant influence over the operations of the investee should be recorded using the equity basis. The theory of the equity method is that the investor should reflect on its books its share of changes occurring on the books of the investee.

For example: On January 2, Year 4, ABC purchased 40% of the outstanding stock of XYZ for $450,000. The carrying amount of XYZ’s net assets (assets – liabilities) on the purchase date was $920,000. Fair values and carrying values were the same for all items except plant and inventory for which fair values exceeded their carrying amounts by $80,000 and $10,000 respectively. The plant had a 20 year life and all the inventory was sold in Year 4. During Year, XYZ reported net income of $150,000 and paid a cash dividend of $30,000.

Equity Method – Normal Journal Entries

A. To record the investment in the investee at cost

<table>
<thead>
<tr>
<th>JE</th>
<th>Equation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in investee (cost)</td>
<td>450,000</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>450,000</td>
<td></td>
</tr>
</tbody>
</table>

B. To record the investor’s share of the investee’s income (40% x $150,000 = $60,000).

<table>
<thead>
<tr>
<th>JE</th>
<th>Equation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in investee</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td>Equity in NI of investee</td>
<td>60,000</td>
<td></td>
</tr>
</tbody>
</table>

Reflecting Theory: The investee’s assets increased from the net income; therefore, ABC’s asset, investment in investee, should reflect the increase. The investee’s income statement increased because it had net income. Therefore, ABC’s income statement account, Equity in Net Income of Investee, should reflect the increase for its 40% share of the investee’s income.

C. To record the investor’s share of the investee’s dividends (40% x $30,000 = $12,000).

<table>
<thead>
<tr>
<th>JE</th>
<th>Equation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td>Investment in investee</td>
<td>12,000</td>
<td></td>
</tr>
</tbody>
</table>

Reflecting Theory: The investee paid a cash dividend, so its assets decreased. Therefore, ABC’s asset account, Investment in Investee, should reflect this decrease.

D. The fourth common entry using the equity method is the most complicated. It involves a situation in which the cost of the investment includes goodwill and undervalued or overvalued assets and/or liabilities.

In the ABC example, the investee’s plant is undervalued by $80,000. ABC’s share of the undervaluation is $32,000 (40% x $80,000). Remember the investee calculated depreciation expense included in its $150,000 net income based on the plants carrying value. Since ABC paid fair value for its 40% share of the plant, it should record additional depreciation on the $32,000. The additional depreciation should be $32,000 divided by the 20 year useful life for a total of $1,600 per year.

The same theory applies to the undervalued inventory. The investee included the book value of the cost of the inventory sold in its calculation of the $150,000 in net income. Since ABC paid fair value for its share of the additional cost of the inventory ($10,000 x 40% = $4,000), the $4,000 should be added to the cost of goods sold.

Therefore, Journal Entry “D” should include the combined total of the $1,600 additional depreciation plus the $4,000 additional cost of goods sold for a combined total of $5,600.

<table>
<thead>
<tr>
<th>JE</th>
<th>Equation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity in NI – Investee</td>
<td>5,600</td>
<td></td>
</tr>
<tr>
<td>Investment in Investee</td>
<td>5,600</td>
<td></td>
</tr>
</tbody>
</table>

The final ledger accounts should appear as follows:
**Goodwill**

Occasionally the candidate will be required to calculate the amount of goodwill included in the cost of the investment in the investee. The calculation is as follows:

<table>
<thead>
<tr>
<th>Price paid for investee</th>
<th>$450,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>vs ABC’s share of the fair value of the investee’s net assets</td>
<td></td>
</tr>
<tr>
<td>Book value of net assets</td>
<td>$920,000</td>
</tr>
<tr>
<td>40% x $920,000</td>
<td>=</td>
</tr>
<tr>
<td>Plus undervalued plant</td>
<td>$80,000</td>
</tr>
<tr>
<td>40% x $80,000</td>
<td>=</td>
</tr>
<tr>
<td>Plus undervalued inventory</td>
<td>$10,000</td>
</tr>
<tr>
<td>40% x $10,000</td>
<td>=</td>
</tr>
<tr>
<td><strong>Total fair value of investee’s net assets</strong></td>
<td>(404,000)</td>
</tr>
<tr>
<td>Goodwill</td>
<td>$ 46,000</td>
</tr>
</tbody>
</table>

Note: Candidates may be confused because there is no mention of testing goodwill for impairment. ASC 350 states that goodwill implicit in equity method investments will not be tested for impairment. However like all assets, equity method investments (not just the goodwill portion) will be tested for permanent declines in value.

**Equity Method when the Investee has Preferred Stock**

If the investee (XYZ) had a $20,000 preferred dividend, ABC would calculate its share of XYZ’s income based on the income available to common shareholders. (Similar to the calculation of Earnings per Share.) The income available to common shareholders would be investee’s net income of $150,000 less the preferred income of $20,000 for a net of $130,000. Therefore, ABC’s share of XYZ’s net income would be 40% x $130,000 = $52,000.

**Special Problems – Cost vs Equity**

**Converting from equity method to cost method:** The conversion from equity to cost is very simple. For example, ABC purchased 40% interest in XYZ in Year 3 for $500,000 and recorded the investment on the equity basis. When the balance in the investment account on July 1, **Year 4** was $540,000 and the balance in the equity in net income of the investee was $60,000,
ABC sold a portion of its investment ($300,000) for $320,000 which reduced its interest in XYZ to 15%. XYZ’s income for the last 6 months of Year 4 was $100,000. On December 1, Year 4, XYZ paid dividends of $50,000. The ledger (T-accounts) are as follows:

<table>
<thead>
<tr>
<th>Investment in Investee – XYZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1, Year 4 balance</td>
</tr>
<tr>
<td>Dec. 31, Year 4 balance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equity in Net Income – Investee XYZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1, Year 4 share of income</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dividend Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 1, Year 4 share of dividends</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gain on Sale of Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1, Year 4 JE</td>
</tr>
</tbody>
</table>

The Journal Entry for the sale of the investment is as follows:

<table>
<thead>
<tr>
<th>July 1, Year 4 JE</th>
<th>Cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>320,000</td>
</tr>
<tr>
<td>Investment in Investee – XYZ</td>
<td>300,000</td>
</tr>
<tr>
<td>Gain on Sale of Investment</td>
<td>20,000</td>
</tr>
</tbody>
</table>

After the July 1, Year 4 Journal Entry, ABC’s investment was reduced to 15%. At that point ABC automatically switched to the cost basis. So on December 1, Year 4 it would record its share of XYZ’s cash dividend (15% x $50,000 = $7,500) as a debit to cash and a credit to dividend revenue.

To summarize, ABC would report on its balance sheet a long-term investment in XYZ of $240,000 and report on the income statement in the equity in net income of the investee account $60,000 for the first 6 months of Year 4 and dividend revenue of $7,500 for the last 6 months of the year and gain on sale of investment of $20,000.

### Converting Cost to Equity Basis

The conversion from cost to equity is more complicated. The conversion requires that ABC record a prior period adjustment to convert the prior year’s cost basis to equity basis. For example: If ABC had owned 10% of XYZ in Year 3 (which would be recorded on the cost basis) but purchased an additional 25% in Year 4, the investment would now be on the equity basis. The accounting on the date of purchase would be to convert the Year 3 investment to equity basis. The conversion would be to record a prior years adjustment to adjust the investment and the January 1, Year 4 retained earnings for XYZ’s 10% change in retained earnings in Year 3. Remember, in Year 3 ABC recorded 10% of XYZ’s dividends. The Journal Entry in Year 4 would be as follows:
Criteria for determining Significant Influence-Equity method  
(FASB ASC Topic 323)

- Investor representation on the board of directors of the investee.
- Investor participation in the policymaking process of the investee.
- Material intercompany transactions.
- Interchange of managerial personnel.
- Technological dependency.
- Extent of ownership by the investor in relation to the size and concentration of other ownership interests in the investee.

STOP! Work Multiple Choice Questions 1 – 12

It is a great review!!

Methods of Accounting for Business Combinations

Theoretically there are three methods of accounting for business combinations:

1. Pooling of Interest
2. Purchase Method
3. Acquisition Method

The Pooling of Interest method was prohibited by ASC 805 eliminated use of the Purchase Method. So the Acquisition Method is the only acceptable method under GAAP for business combinations. For acquisitions occurring before ASC 805 companies were allowed to continue using Pooling of Interest and the Purchase Method; therefore, candidates may still see these in the “real world”. The CPA Exam only asks questions on current GAAP.

As stated earlier, if the parent has controlling interest in subsidiary, it should normally be consolidated. If the controlling interest is difficult to be determined, the guideline is ownership of over 50% of the common stock.

The Acquisition Method

A. The acquisition method is distinguished by four characteristics.
   1. All assets acquired and liabilities assumed in the combination are recognized and measured at their individual fair values.
   2. The fair value of the consideration transferred provides a starting point for valuing and recording a business combination.
      a. The consideration transferred includes cash, securities, and contingent performance obligations.
      b. Direct combination costs are not considered as part of the fair value of the consideration transferred for the acquired firm and are expensed as incurred.
      c. Stock issuance costs are recorded as a reduction in paid-in capital and are not considered to be a component of the consideration transferred.
      d. The fair value of any noncontrolling interest also adds to the valuation of the acquired firm and is recorded at fair value on the acquisition date.
   3. Any excess of the fair value of the consideration transferred over the net amount assigned to the individual assets acquired and liabilities assumed is recognized by the acquirer as goodwill.
   4. Any excess of the net amount assigned to the individual assets acquired and liabilities assumed over the fair value of the consideration transferred is recognized by the acquirer as a “gain on bargain purchase.”

B. ASC 805 requires that in-process research and development acquired in a business combination be recognized as an asset at its acquisition-date fair value.
Consolidation Procedures

A. Eliminate double counting
B. Restate net assets to fair value
C. Record goodwill
D. Record minority interest at fair value on the acquisition date
E. Eliminate intercompany transactions
   1. Inventory
   2. Land, building & equipment
   3. Payables vs receivables
   4. Bonds

THIS AREA INTENTIONALLY LEFT BLANK
These procedures will be explained using the following problem:

Amboy Corporation acquired all of the outstanding $10 par voting common stock of Taft, Inc., on January 1, Year 4, in exchange for 50,000 shares of its $10 par voting common stock. On December 31, 2000, Amboy’s common stock had a closing market price of $15 per share on a national stock exchange. The acquisition was appropriately accounted for as a purchase. Both companies continued to operate as separate business entities maintaining separate accounting records with years ending December 31.

On December 31, Year 4, after year-end adjustments but before the nominal accounts were closed, the companies had condensed general ledger trial balances as follows:

<table>
<thead>
<tr>
<th></th>
<th>Amboy Dr (Cr)</th>
<th>Taft Dr (Cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>$(1,900,000)</td>
<td>$(1,500,000)</td>
</tr>
<tr>
<td>Dividend income from Taft, Inc.</td>
<td>(40,000)</td>
<td></td>
</tr>
<tr>
<td>Gain on sale of warehouse</td>
<td>(30,000)</td>
<td></td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>1,180,000</td>
<td>870,000</td>
</tr>
<tr>
<td>Operating expenses (includes depreciation)</td>
<td>550,000</td>
<td>440,000</td>
</tr>
<tr>
<td>Cash</td>
<td>285,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Accounts receivable (net)</td>
<td>430,000</td>
<td>350,000</td>
</tr>
<tr>
<td>Inventories</td>
<td>530,000</td>
<td>410,000</td>
</tr>
<tr>
<td>Land, plant &amp; equipment</td>
<td>660,000</td>
<td>680,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(185,000)</td>
<td>(210,000)</td>
</tr>
<tr>
<td>Investment in Taft, Inc. (at cost)</td>
<td>750,000</td>
<td></td>
</tr>
<tr>
<td>Accounts payable &amp; accrued expenses</td>
<td>(670,000)</td>
<td>(594,000)</td>
</tr>
<tr>
<td>Common stock ($10 par)</td>
<td>(1,200,000)</td>
<td>(400,000)</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>(140,000)</td>
<td>(80,000)</td>
</tr>
<tr>
<td>Retained earnings (1/1/YR4)</td>
<td>(220,000)</td>
<td>(156,000)</td>
</tr>
<tr>
<td>Dividends paid</td>
<td></td>
<td>40,000</td>
</tr>
<tr>
<td>Total</td>
<td>$ -0-</td>
<td>$ -0-</td>
</tr>
</tbody>
</table>

Additional information is as follows:

- There were no changes in the common stock and additional paid-in capital accounts during Year 4 except the one necessitated by Amboy’s acquisition of Taft.
- At the acquisition date the current value of Taft’s machinery exceeded its book value by $54,000. The excess will be amortized over the estimated average remaining life of six years. The fair values of all of Taft’s other assets and liabilities were equal to their book values. An impairment test at the end of the year indicated that goodwill had lost $3,000 of its value.
- On July 1, Year 4, Amboy sold a warehouse facility to Taft for $129,000 cash. At the date of sale Amboy’s book values were $33,000 for the land and $66,000 for the undepreciated cost of the building. Taft allocated the $129,000 purchase price to the land for $43,000 and to the building for $86,000. Taft is depreciating the building over its estimated five-year remaining useful life by the straight-line method with no salvage value.
- During Year 4 Amboy purchased merchandise from Taft at an aggregate invoice price of $180,000, which included a 100% markup on Taft’s cost. The December 31, Year 4, Amboy owed Taft $75,000 on these purchases, and $36,000 of the merchandise purchased remained in Amboy’s inventory.

Required:
Complete the worksheet to prepare a consolidated income statement and retaining earnings statement for the year ended December 31, Year 4, and a consolidated balance sheet as at December 31, Year 4, for Amboy Corporation and its subsidiary, Taft, Inc. Formal consolidated statements and journal entries are not required. Ignore income tax considerations. Supporting computations should be in good form.

(use worksheet on next page)
### Income Statement

<table>
<thead>
<tr>
<th>Description</th>
<th>Amboy Corp.</th>
<th>Taft Inc.</th>
<th>Adjustments &amp; Eliminations</th>
<th>Adjusted Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>$(1,900,000)</td>
<td>$(1,500,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends from Taft</td>
<td>(40,000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain on sale of warehouse</td>
<td>(30,000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>1,180,000</td>
<td></td>
<td>870,000</td>
<td></td>
</tr>
<tr>
<td>Operating expenses (incl. deprec.)</td>
<td>550,000</td>
<td></td>
<td>440,000</td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>$ (240,000)</td>
<td>$ (190,000)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Retained Earnings Statement

<table>
<thead>
<tr>
<th>Description</th>
<th>Adjustments &amp; Eliminations</th>
<th>Adjusted Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, 1/1/YR 4</td>
<td>$ (220,000)</td>
<td>$(156,000)</td>
</tr>
<tr>
<td>Net income</td>
<td>(240,000)</td>
<td>(190,000)</td>
</tr>
<tr>
<td>Dividends paid</td>
<td></td>
<td>40,000</td>
</tr>
<tr>
<td>Balance, 12/31/YR 4</td>
<td>$ (460,000)</td>
<td>$(306,000)</td>
</tr>
</tbody>
</table>

### Balance Sheet

#### Assets:

<table>
<thead>
<tr>
<th>Description</th>
<th>Adjustments &amp; Eliminations</th>
<th>Adjusted Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 285,000</td>
<td>$ 150,000</td>
</tr>
<tr>
<td>Accounts receivable (net)</td>
<td></td>
<td>350,000</td>
</tr>
<tr>
<td>Inventories</td>
<td>530,000</td>
<td>410,000</td>
</tr>
<tr>
<td>Land, plant &amp; equipment</td>
<td>660,000</td>
<td>680,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(185,000)</td>
<td>(210,000)</td>
</tr>
<tr>
<td>Investment in Taft (at cost)</td>
<td>750,000</td>
<td></td>
</tr>
</tbody>
</table>

$ 2,470,000 | $ 1,380,000

#### Liabilities & Stockholders’ Equity:

<table>
<thead>
<tr>
<th>Description</th>
<th>Adjustments &amp; Eliminations</th>
<th>Adjusted Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts pay. &amp; accrued exp.</td>
<td>$ (670,000)</td>
<td>$(594,000)</td>
</tr>
<tr>
<td>Common stock ($10 par)</td>
<td>(1,200,000)</td>
<td>(400,000)</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>(140,000)</td>
<td>(80,000)</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>(460,000)</td>
<td>(306,000)</td>
</tr>
</tbody>
</table>

$ (2,470,000) | $(1,380,000)
Amboy and Taft - Consolidations

Study Hint: Copy the problem and worksheet and post the eliminating interest as the problem is being worked. This allows you to immediately see the affect on the worksheet.

Look at the format. Initially it appears that the problem will be in a trial-balance format, but on closer inspection the worksheet is in a three-step format. This is the format used in most college textbooks, so candidates should be familiar with it.

Next, notice that the parent company (Amboy) owns 100% of the subsidiary (Taft). So there will not be a problem with minority interest or what the textbooks now call non-controlling interest. Note that the investment in Taft is recorded at cost on the day of acquisition. The problem states that on January 1, Year 4 Amboy purchased 50,000 shares of Taft with a fair value of $15 per share for a total cost of $750,000 and the consolidation requirement is in the year of acquisition.

Double Counting

Basic consolidation theory states that the consolidated entity cannot count the same assets, liabilities and stockholders’ equity accounts twice. So the investment asset account on the parent’s books, investment in Taft, represents the investment in the assets and liabilities of the subsidiary. This is double counting and the consolidated unit cannot count both. Since the individual assets and liabilities of Taft are important to disclose, the investment in subsidiary (Taft) is always eliminated to avoid the double counting. Now look at the stockholders’ equity account of both companies. The stockholders’ equity accounts of the parent “own” the stockholders’ equity of the subsidiary (Taft). Therefore, the stockholders’ equity accounts are always eliminated to prevent double counting.

Restate Net Assets of the Sub to Fair Value

Since the parent company paid fair value for the sub’s net assets, the net assets should be reported initially at the fair value on the consolidated worksheet. Bullet point #2 in the problem states that the net assets of the sub were equal to their fair values except for machinery, which was understated by $54,000. On the consolidated worksheet the $54,000 should be added to the sub’s machinery account to bring it up to fair value. However, notice that the worksheet does not have a machinery account. Therefore, the $54,000 should be added to the account “Land, Plant & Equipment.”

Record Goodwill

Any difference between the price paid for the subsidiary and the fair value of the sub’s identifiable net assets on January 1 is recorded as goodwill. Notice that the goodwill does not appear on either the parent’s or the sub’s books, it is always created on the worksheet.

Eliminating Entry #1 on the Worksheet

The first eliminating entry is to eliminate the double accounting, restate the sub’s net assets to fair value and to record goodwill.

<table>
<thead>
<tr>
<th>JE</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Common stock – Taft</td>
<td>400,000</td>
</tr>
<tr>
<td></td>
<td>Additional paid-in-capital – Taft</td>
<td>80,000</td>
</tr>
<tr>
<td></td>
<td>Retained earnings – Taft – January 1</td>
<td>156,000</td>
</tr>
<tr>
<td></td>
<td>Land, Plant &amp; Equipment</td>
<td>54,000</td>
</tr>
<tr>
<td></td>
<td>Goodwill</td>
<td>60,000</td>
</tr>
<tr>
<td></td>
<td>Investment in Taft – January 1</td>
<td>750,000</td>
</tr>
</tbody>
</table>

The calculation of goodwill is the price paid ($750,000) vs the fair value of the sub’s net assets (book value of stockholders’ equity, $636,000 plus the fair value adjustment for machinery, $54,000) for a total fair value of the net assets of $690,000. The price paid of $750,000 less the fair value of the net assets of the sub, $690,000, equals a goodwill of $60,000.

With the three-step format, entry #1 always uses retained earnings at January 1 because the consolidated December 31 retained earnings will be calculated later. The other way to remember this is that the January 1 investment account has to be eliminated against the January 1 stockholders’ equity accounts.
**Entry #2 on the Worksheet - Adjustments**

Since the machinery account was increased by $54,000, additional depreciation should be recorded on the worksheet. The problem states that the machinery has a remaining life of 6 years. The depreciation would be $54,000 divided by 6 years for an annual depreciation expense of $9,000.

\[
\begin{align*}
\text{JE Operating expenses (incl. deprec.)} & \quad 9,000 \\
\text{Accumulated depreciation} & \quad 9,000
\end{align*}
\]

Note: The worksheet does not have a depreciation expense account, so the operating expense account must be used.

The other adjustment under #2 is to record the impairment of goodwill. Bullet point #2 in the problem states that an impairment test indicates that goodwill has lost $3,000 of its value.

\[
\begin{align*}
\text{JE Impairment loss – goodwill} & \quad 3,000 \\
\text{Goodwill} & \quad 3,000
\end{align*}
\]

Note: The impairment loss should be shown separately and written on the worksheet.

**Eliminating Entry #3 – Intercompany Dividends**

The intercompany dividends paid by the subsidiary to the parent are always eliminated in consolidation. Since the consolidated company is considered one unit, not two companies, the payment of a cash dividend from the subsidiaries to the parent is the equivalent of transferring cash from one pocket to the other. The subsidiaries’ cash decreases, the parent companies’ cash increases and therefore, the cash remains in the consolidated unit. The other point is that the dividends paid account in the retained earnings section of the worksheet should represent dividends paid to outsiders and not dividends paid within the consolidated unit. Therefore, eliminating entry #3 eliminates the dividends paid account on the sub’s books vs the dividend revenue account on the parent’s books.

\[
\begin{align*}
\text{JE Dividends from Taft} & \quad 40,000 \\
\text{Dividends paid} & \quad 40,000
\end{align*}
\]

**Eliminating Entry #4 – Intercompany Sale of Fixed Assets**

Bullet point #3 in the problem indicates that Amboy sold a warehouse facility to Taft and recognized a $30,000 gain on the sale. The Journal entry on Amboy’s books is as follows:

\[
\begin{align*}
\text{JE Cash} & \quad 129,000 \\
\text{Land} & \quad 33,000 \\
\text{Building (book value)} & \quad 66,000 \\
\text{Gain on sale of warehouse} & \quad 30,000
\end{align*}
\]

Taft recorded the purchase of the warehouse facilities follows:

\[
\begin{align*}
\text{JE Land} & \quad 43,000 \\
\text{Building (cost)} & \quad 86,000 \\
\text{Cash} & \quad 129,000
\end{align*}
\]

From a consolidation standpoint, the gain on the sale of the warehouse and the writing up of the assets cannot be recognized because the consolidated unit still owns the warehouse facility. So, a “do-over” eliminating the gain on the sale and restating the land and building to their original book values has to be recorded on the worksheet. The land has to be reduced from $43,000 back to the original cost of $33,000 and the building has to be reduced from $86,000 to the original book value of $66,000.

\[
\begin{align*}
\text{JE Gain on sale of warehouse} & \quad 30,000 \\
\text{Land} & \quad 10,000 \\
\text{Building} & \quad 20,000
\end{align*}
\]

This would be the ideal entry but the worksheet does not have separate land and building accounts, so the worksheet entry would be as follows:

\[
\begin{align*}
\text{JE Gain on sale of warehouse} & \quad 30,000 \\
\text{Land, plant and equipment} & \quad 30,000
\end{align*}
\]
Entry #5 – Overstatement of Depreciation on Taft’s Books

When Taft purchased the warehouse facility it wrote up the value of the building from $66,000 on Amboy’s books to $86,000 for a total write-up of $20,000. Therefore, for the last 6 months, the depreciation expense on Taft’s books has been overstated by $2,000. The overstatement is calculated by dividing the $20,000 by the 5-year remaining life of the machinery for an over-depreciation of $4,000 per year. However, since the building was not purchased until July 1, the over-depreciation should be for 6 months or $2,000.

JE  Accumulated depreciation       2,000
    Operating expenses (incl. deprec.)       2,000

Eliminating Entry #6 – Intercompany Sales of Inventories

There are two approaches used in college textbooks for intercompany sales of inventories. This textbook will oversimplify the first entry and adjust on the third entry. The first two entries are called “freebies” and require very little thinking; whereas, the third entry is a little more complicated.

Eliminate intercompany sales vs cost of goods sold
Internal sales and cost of goods sold should not affect the consolidated totals. The consolidated totals should represent sales and cost of goods sold to outsiders. The entry to eliminate vs sales of cost of goods sold is as follows:

JE  Sales                               180,000
    Cost of goods sold                180,000

Intercompany payable to receivables
Bullet point #4 states that Amboy owes Taft $75,000 on the intercompany purchases. That means that Taft has an accounts receivable from Amboy and Amboy has an accounts payable to Taft. Therefore, the consolidated unit has a payable to itself and a receivable from itself. Since consolidated accounts receivables and accounts payables should represent payables and receivables to outsiders, the intercompany account should be eliminated.

JE  Accounts payable & accrued expenses 75,000
    Accounts receivable              75,000

Intercompany profit in inventory
If intercompany sales and purchases of inventory have been sold to outsiders, the total consolidated profit is the profit on the sale from Taft to Amboy and from Amboy to outsiders, so this is not a consolidation problem. The problem is the profit recognized by Taft on its sale of inventory to Amboy that is still on Amboy’s books. The problem states that the amount of this inventory is $36,000. This means that the $36,000 in inventory on Amboy’s books is at Taft’s selling price. Amboy’s inventory cannot be recorded at sales price and has to be adjusted to cost on the worksheet. The entry to eliminate the intercompany profit in inventory and to restate the inventory to cost is as follows:

JE  Cost of goods sold                18,000
    Inventory                          18,000

The debit to cost of goods sold is because we eliminated too much cost of goods sold in our oversimplified entry in which sales were eliminated in cost of goods sold.

Note: Some textbooks will eliminate sales vs cost of goods sold and eliminate intercompany profit in inventory in one entry rather than two entries as follows:

JE  Sales                               180,000
    Inventory                           18,000
    Cost of goods sold                 162,000
Calculation of the gross profit in the intercompany inventory.

Since the intercompany inventory on Amboy’s books of $36,000 is at sales price, the profit in inventory will be Taft’s gross profit on the sales percentage x the $36,000. Bullet point #4 states that the mark up on cost is 100% and the problem does not provide the gross profit percentage of sales. To convert the 100% mark-up on cost to the gross profit percentage on sales, use the following approach:

<table>
<thead>
<tr>
<th>Sales</th>
<th>200% of cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of goods sold</td>
<td>100% of cost</td>
</tr>
<tr>
<td>Gross profit</td>
<td>100% of cost</td>
</tr>
</tbody>
</table>

Since the gross profit is 100% of cost, cost of goods sold must be 100% of itself and the sales will be the total of the two numbers (200% of cost). The gross profit on sales percentage is the gross profit of 100% divided by the sales of 200% for a 50% gross profit on sales percentage. Therefore, the gross profit to be eliminated from the inventory is 50% x $36,000 or $18,000.

Last Step

The last step is to extend the numbers across the worksheet into the “adjusted balance column” and foot the columns. This can be done manually or by using a spreadsheet program similar to Excel.

Worksheet calculation of net income and December 31 retained earnings – roll down procedure.

Some candidates have trouble calculating the net income portion of the statement of retained earnings. Note the net income line has under the debit and credit columns [a] $262,000 and [a] $164,000 and in the adjusted balance column, (332,000). That whole line is manually “rolled down” and inserted on the net income line of the statement of retained earnings.

The statement of retained earnings line for December 31, Year 4 has in the debit column [b] 418,000 and in the credit column [b] 204,000 and the adjusted balance column has (552,000). This whole line is manually “rolled down” to the retained earnings account on the balance sheet.
**SOLUTION**

*Amboy Corporation and Subsidiary*

**CONSOLIDATING STATEMENT WORKSHEET**

*December 31, Year 4*

<table>
<thead>
<tr>
<th>Adjustments &amp; Eliminations</th>
<th>Amboy Corp.</th>
<th>Taft Inc.</th>
<th>Debit</th>
<th>Credit</th>
<th>Adjusted Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>$(1,900,000)</td>
<td>$(1,500,000)</td>
<td>6</td>
<td>180,000</td>
<td>$(3,220,000)</td>
</tr>
<tr>
<td>Dividends from Taft</td>
<td>(40,000)</td>
<td></td>
<td>[3]</td>
<td>40,000</td>
<td></td>
</tr>
<tr>
<td>Gain on sale of warehouse</td>
<td>(30,000)</td>
<td></td>
<td>[4]</td>
<td>30,000</td>
<td></td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>1,180,000</td>
<td>870,000</td>
<td></td>
<td>6</td>
<td>162,000</td>
</tr>
<tr>
<td>Operating expenses (incl. depreciation)</td>
<td>550,000</td>
<td>440,000</td>
<td>[2]</td>
<td>9,000</td>
<td></td>
</tr>
<tr>
<td>Impairment loss – Goodwill</td>
<td>[2] 3,000</td>
<td></td>
<td></td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>[a] 262,000</td>
<td>[a] 164,000</td>
<td></td>
<td></td>
<td>$(332,000)</td>
</tr>
</tbody>
</table>

**Retained Earnings Statement**

| Balance, 1/1/YR4          | $ (220,000) | $(156,000) | [1] 156,000 | $ (220,000) |
| Net income                | (240,000)   | (190,000)  | [a] 262,000 | [a] 164,000 | $(332,000) |
| Dividends paid            | 40,000      |           | [3] 40,000  |          |
| Balance, 12/31/YR4        | $(460,000)  | $(306,000) | [b] 418,000 | [b] 204,000 | $(552,000) |

**Balance Sheet**

| Assets                     | Cash     | $ 285,000 | $ 150,000 | $ 435,000 |
|                           | Accounts receivable (net) | 430,000 | 350,000 | 705,000 |
|                           | Inventories | 530,000 | 410,000 | 922,000 |
|                           | Land, plant & equipment | 660,000 | 680,000 | 1,364,000 |
|                           | Accumulated depreciation | (185,000) | (210,000) | (402,000) |
|                           | Investment in Taft (at cost) | 750,000 |           | 750,000 |
|                           | Goodwill | [1] 60,000 | [2] 3,000 | 57,000 |
|                           | Total    | $ 2,470,000 | $ 1,380,000 | $ 3,850,000 |

| Liabilities & Stockholders’ Equity | Accounts Pay. & accrued exp. | $ (670,000) | $ (594,000) | $ (1,189,000) |
|                                   | Common stock ($10 par) | (1,200,000) | (400,000) | (1,600,000) |
|                                   | Additional paid-in capital | (140,000) | (80,000) | (220,000) |
|                                   | Retained Earnings | (460,000) | (306,000) | (552,000) |
|                                   | Total             | $(2,470,000) | $(1,380,000) | $(3,850,000) |

*Explanations of Adjustments & Eliminations*

1. To eliminate the reciprocal elements in investment, equity, and property accounts. Amboy’s investment in Taft is recorded at cost at December 31, Year 4.
2. To record impairment loss on goodwill of $3,000.
3. To eliminate Amboy’s dividend income from Taft.
4. To eliminate the intercompany profit on the sale of the warehouse by Amboy to Taft.
5. To eliminate the excess depreciation on the warehouse building sold by Amboy to Taft ($86,000 - $66,000) / 5 x 2/5.
6. To eliminate intercompany sales from Taft to Amboy and the intercompany profit in Amboy’s ending inventory as follows:

<table>
<thead>
<tr>
<th>Total Sales</th>
<th>Total On Hand</th>
<th>Gross Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$180,000</td>
<td>$36,000</td>
<td>90,000</td>
</tr>
<tr>
<td>18,000</td>
<td>18,000</td>
<td>18,000</td>
</tr>
</tbody>
</table>

6. To eliminate Amboy’s intercompany merchandise owed to Taft.
What if Amboy owned only 80% of Taft?

If Amboy owned 80% of Taft then the minority interest would have to own 20%; therefore, Amboy’s portion of the fair value of Taft would be $750,000 x 80% or $600,000 on the day of acquisition and the minority interest share would be $750,000 x 20% or $150,000.

How would the adjusting and eliminating entries change from the previous problem?

Eliminating entry #1 will read: Eliminate the double accounting, restate the net assets of the sub to fair value, record goodwill and record minority interest at the fair value of the date of acquisition.

| JE | Common stock – Taft | 400,000 |
|    | Additional paid –in-capital - Taft | 80,000 |
|    | Retained earnings - Taft - January 1 | 156,000 |
|    | Land, plant & equipment | 54,000 |
|    | Goodwill | 60,000 |
|    | Investment in Taft – January 1 | 600,000 |
|    | Minority interest – Taft – January 1 | 150,000 |

Entry #2 will not change. The minority interest of the additional depreciation and impairment of goodwill will be shown in the calculation of the minority interest’s share of the sub’s net income.

Eliminating entry #3 for intercompany dividends. The intercompany dividends will be allocated 80% to the parent and 20% to minority interest.

| JE | Dividends from Taft (80%) | 32,000 |
|    | Minority interest in dividends (20%) | 8,000 |
|    | Dividends paid | 40,000 |

Eliminating entry #4 – No change because the gain on the sale of the warehouse was on the parent’s books.

Entry #5 – No change. Minority interest share of the excess depreciation will be adjusted in the calculation of the minority interest in sub’s income.

Eliminating entry #6 – No change. Minority interest share of profit in inventory will be adjusted in the calculation of the minority interest in sub’s income.

How does the minority interest change the worksheet?

An additional column called “minority interest” is inserted between the credit column and the adjusted balance column.

<table>
<thead>
<tr>
<th>Example:</th>
<th>Credit</th>
<th>Non-controlling interest</th>
<th>Adjusted balance</th>
</tr>
</thead>
</table>

4-14
How is the non-controlling interest share of the subsidiary’s income shown on the worksheet?

Partial Worksheet
Selected Accounts

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
<th>Non-controlling interest balances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Consolidated net income (worksheet)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-consolidated interest in Taft’s income</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net income to controlling interest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dividends paid Entry #3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minority interest, January 1, Entry #1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minority interest, December 31, (total)</td>
</tr>
</tbody>
</table>

Entry #7  How does a non-controlling interest share of the sub’s income get on the consolidated worksheet?

This is done by using what is called a columnar entry. This means that the minority interest share of the sub’s income is simply written in the two columns.

Entry #7 – Columnar entry

<table>
<thead>
<tr>
<th>JE</th>
<th>Adjusted balance column</th>
<th>32,400</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-controlling interest column</td>
<td>32,400</td>
</tr>
</tbody>
</table>

Note that once the non-controlling interest is totaled ($174,400), it is manually transferred to the adjusted balance column.

Calculation of the minority interest share of the sub’s net income is as follows:

Taft’s net income from the worksheet $190,000
Minus adjustment for depreciation (eliminating entry #2) ( 9,000)
Minus adjustment for impairment loss – goodwill – (eliminating entry #2) ( 3,000)
Minus adjustment for profit in inventory – (eliminating entry #6) ( 18,000)
Plus excess depreciation on warehouse facility – (eliminating entry #3) 2,000

Taft’s adjusted net income $162,000
Multiplied by x 20%

Minority interest share of sub’s net income $ 32,400
Classification of noncontrolling interest in the consolidated statement of financial position:

Stockholder’s Equity

Preferred Stock  xxxx
Common Stock  xxxx
Additional paid in capital  xxxx
Accumulated other comprehensive income  xxxx

Total Parent company shareholder’s equity  xxxx
Noncontrolling Interest  xxxx

Total Equity  xxxx

THIS AREA INTENTIONALLY LEFT BLANK
The next problem is in a balance sheet format and has minority interest.

The December 31, Year 5, condensed balance sheets of Pym Corp. and its 80%-owned subsidiary, Sy Corp., are presented in the worksheet. Additional information follows:

- Pym’s investment in Sy was purchased for $1,200,000 cash on January 1, Year 5, and is accounted for by the equity method.
- At January 1, Year 5, Sy’s retained earnings amounted to $600,000, and its common stock amounted to $200,000.
- Sy declared a $1,000 cash dividend in December Year 5, payable in January, Year 6.
- As of December 31, Year 5, Pym had not recorded any portion of Sy’s Year 5 net income or dividend declaration.
- Sy borrowed $100,000 from Pym on June 30, Year 5, with the note maturing on June 30, Year 6, at 10% interest. Correct accruals have been recorded by both companies.
- During Year 5, Pym sold merchandise to Sy at an aggregate invoice price of $300,000, which included a profit of $60,000. At December 31, Year 5, Sy had not paid Pym for $90,000 of these purchases, and 5% of the total merchandise purchased from Pym still remained in Sy’s inventory.
- Pym’s excess cost over book value of Pym’s investment in Sy has appropriately been identified as goodwill and an impairment test at the end of the year indicated that goodwill had lost $48,000 of its value.

Required:

Complete the worksheet for Pym Corp. and its subsidiary, Sy Corp., at December 31, Year 5. A formal consolidated balance sheet and journal entries are not required. Note: This is in the year of acquisition.

(use worksheet on the next page)
### Pym Corp and Subsidiary

**Consolidated Balance Sheet Worksheet**  
December 31, Year 5

<table>
<thead>
<tr>
<th></th>
<th>Pym Corp.</th>
<th>Sy Corp.</th>
<th>Adjustments &amp; Eliminations</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>75,000</td>
<td>15,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts and other current receivables</td>
<td>410,000</td>
<td>120,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandise inventory</td>
<td>920,000</td>
<td>670,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant and equipment (net)</td>
<td>1,000,000</td>
<td>400,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment in Sy Corp.</td>
<td>1,200,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>3,605,000</td>
<td>1,205,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liabilities and Stockholders’ Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable and other current liabilities</td>
<td>140,000</td>
<td>305,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock ($10 par)</td>
<td>500,000</td>
<td>200,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retained earnings</td>
<td>2,965,000</td>
<td>700,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>3,605,000</td>
<td>1,205,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Pym Corp. and Subsidiary (Sy Corp.)

Note that Pym Corp. owns 80% of the subsidiary and the non-controlling interest owns 20%. The format is a balance sheet format.

Note: Most college textbooks do not cover this format. The basic rule for this format is that entries that would normally be made to the income statement will be made to the parent’s retained earnings account.

Note: This is a common but very difficult question on the CPA Exam, so candidates should have an excellent knowledge of this problem.

Equity Method

Bullet point #1 in the problems states that the investment is recorded on the equity basis but a closer look at the worksheet indicates that the investment is shown at cost. Bullet point #3 indicates that the journal entries for the equity method have not been made; therefore, before the consolidation can begin, the investment account must be converted to the equity method.

Converting to the equity method is necessary because the investment account is going to be eliminated against the stockholders’ equity at December 31, which includes the current year’s net income and dividends. Therefore, the investment account should be adjusted to the equity method at December 31, in order for the investment account to include the sub’s net income and dividends.

Adjusting Entry A – Record parent’s share of sub’s net income

Since the question does not include the parent’s income, it must be calculated. Bullet point #2 indicates that the sub’s retained earnings at January 1 is $600,000 and the December 31 worksheet shows an ending retained earnings of $700,000. Therefore, the change in retained earnings for the year is an increase of $100,000. Since retained earnings change of $100,000 is the total of the net income less the dividends of $1,000, the net income must be $101,000 ($100,000 + $1,000). Therefore, the parent’s share of the net income is $101,000 x 80% or $80,800. The journal entry to adjust the investment account for its share of the net income is as follows:

JE  Investment in Sy Corp.   80,800  
     Retained earnings (parent)   80,800

Adjusting Entry B – Record parent’s share of the sub’s dividends

The parent’s share of the sub’s dividends are the total dividends of $1,000 x 80% = $800.

JE  Accounts and other current receivables   800  
     Investment in Sy Corp.   800

Note: Ideally, the debit would have been to dividends receivable but the worksheet does not provide that account.

Eliminating Entry C –
To eliminate intercompany dividends receivable vs dividends payable

Bullet point #2 states that Sy declared the cash dividend in December 31; so the sub should have accrued the dividend payable. Therefore, the entry to eliminate the intercompany dividend payable of $800 vs the dividend receivable of $800 accrued in Entry B, should be as follows:

Note: The worksheet does not have a dividend payable or dividend receivable account.

JE  Accounts payable and other current liabilities   800  
     Accounts and other current receivables   800

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Eliminating Entry D – To eliminate the equity of the sub at December 31 vs the investment in the sub at December 31 to avoid double counting, to record 100% of the goodwill and allocate 20% of the fair value of Sy Corp. to the minority interest at December 31.

**Calculation of the December 31 balance in the investment in Sy account.**
The December 31 balance of the investment in Sy Corp. is the initial cost of $1,200,000 + the parent’s share of the net income of $80,800 less the parent’s share of the sub’s dividends of $800 for a total balance of $1,280,000.

**Calculation of the total value of Sy Corp. at January 1.**
Since ASC 810 requires that Sy Corp. be reported at its total fair value, the goodwill shown at 100% and the minority interest at fair value at acquisition date, the total fair value must be calculated. Therefore, the $1,200,000 January 1 cost to the parent represents 80% of the fair value. Calculation of the total fair value is the $1,200,000 divided by 80% for a total of $1,500,000. at January 1.

**Calculation of the minority interest at the acquisition date is the total fair value of $1,500,000 x 20% = $300,000.**

**Calculation of goodwill at the acquisition date:**


<table>
<thead>
<tr>
<th>Value</th>
<th>$1,500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>vs</td>
<td></td>
</tr>
<tr>
<td>Book value of the sub at January 1</td>
<td></td>
</tr>
<tr>
<td>(See Bullet point #2)</td>
<td></td>
</tr>
<tr>
<td>Common Stock</td>
<td>$200,000</td>
</tr>
<tr>
<td>Retained earnings, January 1</td>
<td>600,000</td>
</tr>
<tr>
<td>Total book value</td>
<td>( 800,000)</td>
</tr>
<tr>
<td>Goodwill (see Bullet #7)</td>
<td>$ 700,000</td>
</tr>
</tbody>
</table>

**Minority interest at December 31** is the minority at the acquisition date of $300,000 + 20% of the $101,000 sub’s net income = $20,200 less 20% of the sub’s $1,000 dividend = $200 for a total minority interest at December 31 of $320,000.

To summarize, the journal entry is as follows:

| JE | Common stock – Sy Corp. – December 31 | 200,000 |
| JE | Retained earnings – Sy Corp – December 31 | 700,000 |
| JE | Goodwill | 700,000 |
| JE | Investment in Sy Corp. – December 31 | 1,280,000 |
| JE | Minority interest – Sy Corp. – December 31 | 320,000 |

Note: The candidate has to manually write goodwill and minority interest on the worksheet.

**Adjusting Entry E – To record the impairment of goodwill for $48,000 (see Bullet point #7)**

Since ASC 810 requires the recording of 100% of the goodwill, theoretically, 80% of the goodwill is allocated to the parent and 20% to the minority interest. Therefore, the impairment loss should be allocated between both accounts.

| JE | Retained earnings – parent (80%) | 38,400 |
| JE | Minority interest (20%) | 9,600 |
| JE | Goodwill | 48,000 |

**Eliminating Entry F – To eliminate the intercompany current note payable vs the current notes receivable (Bullet point #5)**

Note: The worksheet does not have accounts for the notes therefore, the eliminating entry will be as follows:

| JE | Accounts payable & other current liabilities | 100,000 |
| JE | Accounts & other current receivables | 100,000 |
Eliminating Entry G – To eliminate the accrued interest payable vs the accrued interest receivable on the notes (Bullet point #5)

The accrued interest is the $100,000 note times 10% for 6/12 of the year = $5,000. Again the worksheet does not have an interest payable or interest receivable account therefore, the entry will be as follows:

JE  Accounts payable & other current liabilities       5,000
    Accounts & other current receivables        5,000

Note: If this problem had been in a three-step format, with an income statement, the intercompany interest revenue would have been eliminated against the interest expense.

Eliminating Entry H – To eliminate the intercompany accounts payable vs the intercompany accounts receivable for purchases and sales of merchandise of $90,000 (Bullet point #6)

JE  Accounts payable & other current liabilities     90,000
    Accounts & other current receivables      90,000

Eliminating Entry I – To eliminate the intercompany profit in the portion of the inventory not sold to outsiders and to restate the inventory from Pym’s selling price to cost on Sy’s books.

Bullet point #6 states that 5% of the total profit of $60,000 or $3,000 is included in the intercompany inventory on Sy’s books; therefore, the journal entry to eliminate the intercompany profit and restate the inventory to cost is as follows:

JE  Retained earnings – parent        3,000
    Inventory           3,000

Note: Since the parent sold the inventory to the sub, all the profit is on the parent’s books and the minority interest is not affected.

Last Step – Add them up on the worksheet and pray that it balances.
### SOLUTION

*Pym Corp. and Subsidiary*

CONSOLIDATED BALANCE SHEET WORKSHEET

*December 31, Year 5*

<table>
<thead>
<tr>
<th>Assets</th>
<th>Pym Corp.</th>
<th>Sy Corp.</th>
<th>Debit</th>
<th>Credit</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 75,000</td>
<td>$ 15,000</td>
<td></td>
<td></td>
<td>$ 90,000</td>
</tr>
<tr>
<td>Accounts and other</td>
<td>410,000</td>
<td>120,000</td>
<td>[b] 800</td>
<td>[c] 800</td>
<td></td>
</tr>
<tr>
<td>current receivables</td>
<td></td>
<td></td>
<td>[f] 100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[g] 5,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[h] 90,000</td>
<td></td>
<td>335,000</td>
</tr>
<tr>
<td>Merchandise inventory</td>
<td>920,000</td>
<td>670,000</td>
<td></td>
<td>[i] 3,000</td>
<td>1,587,000</td>
</tr>
<tr>
<td>Plant and equipment (net)</td>
<td>1,000,000</td>
<td>400,000</td>
<td></td>
<td></td>
<td>1,400,000</td>
</tr>
<tr>
<td>Investment in Sy Corp.</td>
<td>1,200,000</td>
<td></td>
<td>[a] 80,800</td>
<td>[b] 800</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[d] 1,280,000</td>
<td></td>
<td>– 0 –</td>
</tr>
<tr>
<td>Goodwill</td>
<td></td>
<td></td>
<td>[d] 700,000</td>
<td>[e] 48,000</td>
<td>652,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$3,605,000</td>
<td>$1,205,000</td>
<td></td>
<td></td>
<td>$4,064,000</td>
</tr>
</tbody>
</table>

*Liabilities and Stockholders’ Equity*

<table>
<thead>
<tr>
<th>Liabilities and Stockholders’ Equity</th>
<th>Pym Corp.</th>
<th>Sy Corp.</th>
<th>Debit</th>
<th>Credit</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and other</td>
<td>$ 140,000</td>
<td>$ 305,000</td>
<td>[c] 800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>current liabilities</td>
<td></td>
<td></td>
<td>[g] 5,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[h] 90,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[f] 100,000</td>
<td></td>
<td>$ 249,200</td>
</tr>
<tr>
<td>Common stock ($10 par)</td>
<td>500,000</td>
<td>200,000</td>
<td>[d] 200,000</td>
<td></td>
<td>500,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>2,965,000</td>
<td>700,000</td>
<td>[d] 700,000</td>
<td>[e] 38,400</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[i] 3,000</td>
<td>[a] 80,800</td>
<td>3,004,400</td>
</tr>
<tr>
<td>Minority interest 20%</td>
<td></td>
<td>[e] 9,600</td>
<td>[d] 320,000</td>
<td></td>
<td>310,400</td>
</tr>
<tr>
<td>Totals</td>
<td>$3,605,000</td>
<td>$1,205,000</td>
<td>$1,928,400</td>
<td>$1,928,400</td>
<td>$4,064,000</td>
</tr>
</tbody>
</table>
The Amboy and Pym problems covered all of the consolidation procedures except the intercompany purchase of parent or sub’s bonds.

In theory, since the bonds are not outstanding in the hands of the public, for consolidation purposes, the bonds have been retired and the consolidation worksheet should show a gain or loss on retirement of the bonds.

For example, the parent purchased $100,000 of the sub’s bonds for $95,000. The sub had originally issued bonds at par of $100,000. The parent would have an investment in the bonds account on its books for $95,000 and the sub would have a bonds payable account on its books for $100,000. The eliminating entry on the worksheet would be to eliminate the bond accounts and recognize a gain on retirement of bonds of $5,000:

<table>
<thead>
<tr>
<th>JE</th>
<th>Bonds payable (sub)</th>
<th>100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment in bonds (parent)</td>
<td>95,000</td>
</tr>
<tr>
<td></td>
<td>Gain on Retirement of bonds</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Reasons not to consolidate:

Normally if the parent owns controlling interest of the sub, it should consolidate. However, if the parent does not have legal control, it does not consolidate. For example, if the subsidiary is in bankruptcy, legal re-organization or has legal restrictions on a foreign subsidiary which limits its ability to control, the parent does not have control and should not consolidate.

If the subsidiary is not consolidated, the investment in the subsidiary must be recorded at cost.

Complex calculation of goodwill

Example: XYZ purchased 100% of ABC Corp. for $1,000,000. At the time of the acquisition, the fair value of ABC’s net assets was $950,000. Direct cost of the purchase from investment brokers, lawyers and accountants was $75,000. Internal secretarial and administrative support on the acquisition was estimated to be $50,000. The stock issuance cost was $35,000.

The calculation of goodwill is as follows:

\[
\begin{align*}
\text{Price paid for the purchase of the subsidiary} & \quad \text{\$1,000,000} \\
\text{vs} \\
\text{Fair value of the sub’s net assets} & \quad (950,000) \\
\text{Goodwill} & \quad \text{\$50,000}
\end{align*}
\]

ASC 810 states that the direct and indirect cost associated with an acquisition, should be expensed.

The cost of issuing the stock should be recorded as reduction in paid-in-capital.

Gain on bargain purchase

If the fair value of subsidiaries net assets exceeds the price paid to acquire the subsidiary, the difference is recorded as a gain on a bargain purchase.

ASC 805 Business Combinations

ASC 805 provides three major changes in financial reporting:

- Eliminates the use of pooling of interest and requires that all business combinations use the purchase method.
- Provides greater guidance in recognizing intangible assets.
- Requires disclosures of the primary reasons for business combinations and expanded purchase price allocation information.
Intangible Assets

Intangible assets include both current assets and non-current assets that lack physical substance. ASC 350 describes two attributes for recognition of an intangible asset.

- Does the intangible asset arise from contractual or other legal rights?
- Is the intangible asset capable of being separated or divided from the acquired entity and sold, transferred, licensed, rented or exchanged.

Appendix A of ASC 350 includes a list of intangible assets that meet the recognition criteria.

**Illustrative Examples of Intangible Assets That Meet the Criteria for Recognition Separately from Goodwill (ASC 350)**

The following are illustrative examples of intangible assets that, if acquired in a business combination, generally would meet the criteria for recognition as an asset separately from goodwill. Assets designated by the symbol © are those that would generally be recognized separately from goodwill because they meet the contractual-legal criterion. Assets designated by the symbol (s) do not arise from contractual or other legal rights, but should nonetheless be recognized separately from goodwill because they meet the separability criterion. The determination of whether a specific identifiable intangible asset acquired meets the criteria in this Statement for recognition separately from goodwill should be based on the facts and circumstances of each individual business combination.*

**Marketing-related intangible assets**
1. Trademarks, tradenames ©
2. Service marks, collective marks, certification marks ©
3. Trade dress (unique color, shape or package design) ©
4. Newspaper mastheads ©
5. Internet domain names ©
6. Noncompetition agreements ©

**Customer-related intangible assets**
1. Customer lists (s)
2. Order or production backlog ©
3. Customer contracts and the related customer relationships ©

**Artistic-related intangible assets**
1. Plays, operas and ballets ©
2. Books, magazines, newspapers and other literary works ©
3. Musical works such as compositions, song lyrics, advertising jingles ©
4. Pictures and photographs ©
5. Video and audiovisual material, including motion pictures, music videos, and television programs ©

**Contract-based intangible assets**
1. Licensing, royalty, standstill agreements ©
2. Advertising, construction, management, service or supply contracts ©
3. Lease agreements ©
4. Construction permits ©
5. Franchise agreements ©
6. Operating and broadcast rights ©
7. Use rights such as landing, drilling, water, air, mineral, timber cutting, and so forth ©
8. Servicing contracts such as mortgage servicing contracts ©
9. Employment contracts ©

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Technology-based intangible assets
1. Patented technology  c
2. Mask works  c
3. Internet domain names  c
4. Unpatented technology  s
5. Databases, including title plants  s
6. Trade secrets including secret formulas, processes, recipes  c

*The intangible assets designated by the symbol © also might meet the separability criterion. However, separability is not a necessary condition for an asset to meet the contractual-legal criterion.

Note: The FASB specifically states that an assembly work force shall not be recognized as an intangible asset apart from goodwill.

Disclosures in Financial Statements
I. The notes to the financial statements of a combined entity shall disclose the following information in the period in which a material business combination is completed:
   a. The name and a brief description of the acquired entity and the percentage of voting equity interests acquired.
   b. The primary reason for the acquisition, including a description of the factors that contributed to a purchase price that results in recognition of goodwill.
   c. The period for which the results of operations of the acquired entity are included in the income statement of the combined entity
   d. The cost of the acquired entity and, if applicable, the number of shares of equity interests (such as common shares, preferred shares, or partnership interests) issued or issuable, the value assigned to those interests, and the basis for determining that value
   e. A condensed balance sheet disclosing the amount assigned to each major asset and liability caption of the acquired entity at the acquisition date
   f. Contingent payments, options, or commitments specified in the acquisition agreement and the accounting treatment that will be followed should any such contingency occur
   g. The amount of purchased research and development assets acquired and written off in the period and the line item in the income statement in which the amounts written off are aggregated
   h. For any purchase price allocation that has not been finalized, that fact and the reasons therefor. In subsequent periods, the nature and amount of any material adjustments made to the initial allocation of the purchase price shall be disclosed.

II. The notes to the financial statements also shall disclose the following information in the period in which a material business combination is completed if the amounts assigned to goodwill or to other intangible assets acquired are significant in relation to the total cost of the acquired entity:
   a. For intangible assets subject to amortization:
      1. The total amount assigned and the amount assigned to any major intangible asset class
      2. The amount of any significant residual value, in total and by major intangible asset class
      3. The weighted-average amortization period, in total and by major intangible asset class
   b. For intangible assets not subject to amortization, the total amount assigned and the amount assigned to any major intangible class
c. For goodwill:
   1. The total amount of goodwill and the amount that is expected to be deductible for tax purposes
   2. The amount of goodwill by reportable segment (if the combined entity is required to disclose segment information in accordance with FASB Statement ASC 250, Disclosures about Segments of an Enterprise and Related Information), unless not practicable.

ASC 350 Goodwill and Other Intangible Assets

ASC 350 provides two major changes in financial reporting related to business combinations. The first major change goodwill will no longer be amortized systematically over time. This nonamortization approach will be applied to both previously recognized and newly acquired goodwill. In the second major change, goodwill will be subject to an annual test for impairment. When the carrying amount of goodwill exceeds its implied fair value, an impairment loss is recognized equal to that excess.

Testing Goodwill for Impairment

ASC 350 describes the following two-step approach for testing goodwill for impairment:

- The first step of the goodwill impairment test, used to identify potential impairment, compares the fair value of a reporting unit with its carrying amount, including goodwill. If the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired, thus the second step of the impairment test is unnecessary. If the carrying amount of a reporting unit exceeds its fair value, the second step of the goodwill impairment test shall be performed to measure the amount of impairment loss, if any.

- The second step of the goodwill impairment test, used to measure the amount of impairment loss, compares the implied fair value of reporting unit goodwill with the carrying amount of that goodwill. If the carrying amount of reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss shall be recognized in an amount equal to that excess. The loss recognized cannot exceed the carrying amount of goodwill. After a goodwill impairment loss is recognized, the adjusted carrying amount of goodwill shall be its new accounting basis. Subsequent reversal of a previously recognized goodwill impairment loss is prohibited once the measurement of that loss is completed.

Calculation of Implied Fair Value of Goodwill

The implied fair value of goodwill shall be determined in the same manner as the amount of goodwill recognized in a business combination is determined. That is, an entity shall allocate the fair value of a reporting unit to all of the assets and liabilities of that unit (including any unrecognized intangible assets) as if the reporting unit had been acquired in a business combination and the fair value of the reporting unit was the price paid to acquire the reporting unity. The excess of the fair value of a reporting unit over the amounts assigned to its assets and liabilities is the implied fair value of goodwill. That allocation process shall be performed only for purposes of testing goodwill for impairment; an entity shall not write up or write down a recognized asset or liability, nor should it recognize a previously unrecognized intangible asset as a result of that allocation process.

Simple Example

On January 2, 20X2, ABC Company purchased all the outstanding stock of XYZ Corporation for $2,000. The fair value of identifiable assets is $1600 and $400 of goodwill is recorded.

XYZ recorded a loss for 20X2 and forecast continuing losses. An analysis of the company (reporting unit) indicates that the reporting units fair value is now only $150 above the fair value of the identifiable net assets. Therefore, the implied value of goodwill has fallen to $150. As a result the consolidated unit will report a $250 ($400 – $150) goodwill impairment loss on a separate line on the income statement and report goodwill on a separate line on the balance sheet at $150.
What are Reporting Units?

The FASB noted that goodwill is primarily associated with individual reporting units within the consolidated entity. Such goodwill is often considered “synergistic” because it arises from the interaction of the assets of the acquired company with those of the acquirer in specific ways. To better assess potential declines in value for goodwill (in place of amortization), the most specific business level at which goodwill is evident was chosen as the appropriate level for impairment testing. This specific business level is referred to as the reporting unit. The FASB also noted that, in practice, goodwill is often assigned to reporting units either at the level of a reporting segment – as described in ASC 250 Disclosures about Segments of an Enterprise and Related Information – or at a lower level within a segment of a combined enterprise. Consequently, the reporting unit became the designated enterprise component for tests of goodwill impairment. Reporting units may thus include the following:

- A component of an operating segment at a level below the operating segment. Segment management should review and assess performance at this level. Also, the component should be a business in which discrete financial information is available and differ economically from other components of the operating segment.
- The segments of an enterprise
- The entire enterprise

For example, ABC consolidated company includes four operating segments resulting from the parent company and three acquisitions of companies X, Y, and Z. ABC tested each separate reporting unit for goodwill impairment. ABC compared the fair market of each of its reporting units to its carrying value. The comparison revealed that the fair value of each of the reporting units exceeded its carrying value except segment Z.

According to ASC 350, Segment Z must apply the second step of impairment testing, a comparison of the implied value of its goodwill to its carrying value. The carrying value of its goodwill was $150,000.

The following data was used for the test:

**Segment Z:** December 31, 20X2 fair market value $3,000,000

Fair values of Segment Z net assets at Dec. 31, 20X2

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Assets</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Property</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>500,000</td>
</tr>
<tr>
<td>Subscriber list</td>
<td>300,000</td>
</tr>
<tr>
<td>Patented technology</td>
<td>400,000</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>(250,000)</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>(550,000)</td>
</tr>
</tbody>
</table>

Value assigned to identifiable net assets (2,900,000)

Value assigned to goodwill $100,000

Carrying value before impairment (150,000)

Impairment loss $50,000

The necessary comparisons to determine if goodwill is impaired depend first on the fair value computation of the reporting unit and then, if necessary, the fair value computation for goodwill. But how are such values computed? How can fair values be known if the subsidiary is wholly-owned and thus not traded publicly?

Several alternative methods exist for determining the fair values of the reporting units that comprise a consolidated entity.

- First, any quoted market prices that exist can provide a basis for assessing fair value – particularly for subsidiaries with actively traded non-controlling interests.
- Second, a comparable businesses may exist that can help indicate market values.
- Third, there are a variety of present value techniques for assessing the fair value of an identifiable set of future cash flow streams, or profit projections discounted for the riskiness of the future flows.
ASC 350 Disclosures:

The changes in the carrying amount of goodwill during the period including:
1. The aggregate amount of goodwill acquired
2. The aggregate amount of impairment losses recognized
3. The amount of goodwill included in the gain or loss on disposal of all or a portion of a reporting unit.

For each impairment loss recognized related to an intangible asset, the following information shall be disclosed in the notes to the financial statements that include the period in which the impairment loss is recognized:
   a. A description of the impaired intangible asset and the facts and circumstances leading to the impairment
   b. The amount of the impairment loss and the method for determining fair value
   c. The caption in the income statement or the statement of activities in which the impairment loss is aggregated
   d. If applicable, the segment in which the impaired intangible asset is reported under Statement 131.

For each goodwill impairment loss recognized, the following information shall be disclosed in the notes to the financial statements that include the period in which the impairment loss is recognized:
   a. A description of the facts and circumstances leading to the impairment
   b. The amount of the impairment loss and the method of determining the fair value of the associated reporting unit (whether based on quoted market prices, prices of comparable businesses, a present value or other valuation technique, or a combination thereof)
   c. If a recognized impairment loss is an estimate that has not yet been finalized that fact and the reasons therefor and, in subsequent periods, the nature and amount of any significant adjustments made to the initial estimate of the impairment loss.

Combined Financial Statements

To justify the preparation of consolidated statements, the controlling financial interest should rest directly or indirectly in one of the companies included in the consolidation. There are circumstances, however, where combined financial statements (as distinguished from consolidated statements) of commonly controlled companies are likely to be more meaningful than their separate statements. For example, combined financial statements would be useful where one individual owns a controlling interest in several corporations which are related in their operations. Combined statements would also be used to present the financial position and the results of operations of a group of unconsolidated subsidiaries. They might also be used to combine the financial statements of companies under common management.

Where combined statements are prepared for a group of related companies, such as a group of unconsolidated subsidiaries or a group of commonly controlled companies, intercompany transactions and profits or losses should be eliminated, and if there are problems in connection with such matters as minority interests, foreign operations, different fiscal periods, or income taxes, they should be treated in the same manner as in consolidated statements. To the extent there is any intercompany investment, it is offset against the related equity. If there is no intercompany investment, the individual companies' equities are combined.
ASC 810—CONSOLIDATION OF VARIABLE INTEREST ENTITIES

ASC 810, CONSOLIDATION OF VARIABLE INTEREST ENTITIES is a response to some of the accounting problems associated with SPECIAL PURPOSE ENTITIES, such as those involved with Enron. A VIE is an off-balance sheet arrangement that may take any legal form.

ASC 810 explains how a VIE may not have to be controlled through traditional voting ownership, but may be controlled by the financial support of the primary beneficiary and have to be consolidated by the primary beneficiary.

According to ASC 810, a VIE exists and must be consolidated if either of the following two conditions exist:

1. The VIE is undercapitalized because the equity at risk is not sufficient to finance its activities without additional subordinated financial support from other parties.
2. The equity investors lack any of the following characteristics of a controlling financial interest:
   a. Decision-making ability based on voting or similar rights
   b. An obligation to absorb expected losses if they occur, or
   c. The right to receive expected residual returns if they occur.

EXAMPLE: ABC Company seeks to acquire XYZ Electric Power Company for $800 million. In discussing financing with different lenders, ABC realized that it could receive lower financing, because of the power plant’s collateral, by establishing a special purpose entity to purchase the plant and lease it to ABC. ABC found nonvoting equity interest to invest $32 million in the power plant and the special purpose entity issued $768 million in bonds guaranteed by ABC Company. Since ABC guaranteed the bonds and the equity interest is nonvoting, the equity in SPE would meet the criteria for a VIE (undercapitalized and no decision-making ability) and should be consolidated with ABC Company, the primary beneficiary.
IFRS vs US GAAP

With the issuance of ASC 805 on Business Combinations and ASC810 on Consolidation along with the revised IFRS3, the accounting for Business Combinations was effectively converged with a few minor exceptions.

The acquisition method which requires that acquisition-date fair values be used as the basis for consolidation was approved by both bodies. This means that goodwill is recorded at 100% of its fair value at the acquisition date and the non-controlling interest is recorded initially at its share of the fair values including goodwill.

IFRS3R allows an exception to the acquisition-date fair value approach to the non-controlling interest. This approach is called the “proportionate-share option”. The approach records the non-controlling interest at the proportionate share of the acquiree’s fair value of the identifiable net assets which excludes goodwill. The effect of this approach is that the consolidated goodwill applies only to the controlling interest.

Another difference is that the calculation of the impairment of goodwill is a two-step approach for US GAAP but a one-step approach for IFRS.

For IFRS, any excess of the carrying value over the fair value for a cash-generating unit is first allocated to the impairment of goodwill. In the event that the goodwill is reduced to zero and additional reductions need to be made, the other assets of the cash-generating unit are reduced pro-rate based on the carrying amounts of these other assets.

Cash-generating units represent the lowest level for the assignment of goodwill that is monitored by top management. Each of these units must have independent cash flows. Examples would be subsidiaries, operating segments or a small group of assets.

To illustrate, look at the following examples of goodwill impairment:

<table>
<thead>
<tr>
<th>Cash-generating units</th>
<th>Apple</th>
<th>Baker</th>
<th>Cain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill</td>
<td>$300</td>
<td>$1,500</td>
<td>$1,000</td>
</tr>
<tr>
<td>Fair Value</td>
<td>$6,000</td>
<td>$10,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Book Value including Goodwill</td>
<td>$4,500</td>
<td>$10,500</td>
<td>$15,600</td>
</tr>
<tr>
<td>Fair Value of Identifiable Net Assets</td>
<td>$5,400</td>
<td>$9,500</td>
<td>$14,500</td>
</tr>
<tr>
<td>Impairment Test</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Impairment Loss</td>
<td>-0-</td>
<td>$500</td>
<td>$600</td>
</tr>
<tr>
<td>Goodwill remaining after impairment</td>
<td>$300</td>
<td>$1,000</td>
<td>$400</td>
</tr>
</tbody>
</table>

The impairment test for Apple compares the fair value of $6,000 to the book value of $4,500 of since the fair value exceeds the carrying value, there is not any indication of impairment.
The impairment test for Baker compares the fair value of $10,000 to the carrying value of $10,500 which indicates an impairment loss of $500. The impairment loss of $800 is deducted from the original goodwill of $1,500. This means that the remaining goodwill reported by the cash generating unit is $1,000.

The impairment test for Cain compares the fair value of $15,000 versus the book value $15,600 for an impairment loss of $600. The impairment loss of $600 is deducted from the original goodwill of $1,000. This means that the remaining goodwill reported by the cash generating unit is $400.

Please note that the “fair value of the identifiable net assets” included in the illustration is not used in any of the IFRS calculations. These amounts are used in US GAAP in the two-step approach to calculating the impairment of goodwill.

Also note that the loss from the impairment of goodwill is reported as a part of operating income for both US GAAP and IFRS.

### FAST TRACK SUMMARY
of CHAPTER 4 DIFFERENCE
BETWEEN IFRS AND US GAAP

<table>
<thead>
<tr>
<th></th>
<th>US GAAP</th>
<th>IFRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor owns significant influence in Investee</td>
<td>Equity Method</td>
<td>Equity Method</td>
</tr>
<tr>
<td>Acquisition consolidation method</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Proportionate consolidation method</td>
<td>Not Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Lowest Basis of Reporting Goodwill</td>
<td>Reporting unit</td>
<td>Cash Generating Unit</td>
</tr>
<tr>
<td>Goodwill Impairment Calculation</td>
<td>Two-step Method</td>
<td>One-step Method</td>
</tr>
<tr>
<td>Reporting Goodwill Impairment</td>
<td>Operating Income</td>
<td>Operating Income</td>
</tr>
<tr>
<td>Test Goodwill Impairment</td>
<td>At least annually</td>
<td>At least annually</td>
</tr>
<tr>
<td>Classification of consolidated non-controlling interest</td>
<td>Stockholders’ Equity</td>
<td>Stockholders’ Equity</td>
</tr>
</tbody>
</table>
Chapter Four
Consolidated Financial Statements Questions

COST METHOD

1. Day Co. received dividends from its common stock investments during the year ended December 31, Year 2, as follows:

- A stock dividend of 400 shares from Parr Corp. on July 25, Year 2, when the market price of Parr’s shares was $20 per share. Day owns less than 1% of Parr’s common stock.
- A cash dividend of $15,000 from Lark Corp. in which Day owns a 25% interest. A majority of Lark’s directors are also directors of Day.

What amount of dividend revenue should Day report in its Year 2 income statement?

a. $23,000
b. $15,000
c. $8,000
d. $0

EQUITY METHOD

2. On July 1, Year 3, Denver Corp. purchased 3,000 shares of Eagle Co.’s 10,000 outstanding shares of common stock for $20 per share. On December 15, Year 3, Eagle paid $40,000 in dividends to its common stockholders. Eagle’s net income for the year ended December 31, Year 3, was $120,000, earned evenly throughout the year. In its Year 3 income statement, what amount of income from this investment should Denver report?

a. $36,000
b. $18,000
c. $12,000
d. $6,000

3. On January 2, Year 2, Well Co. purchased 10% of Rea, Inc.’s outstanding common shares for $400,000. Well is the largest single shareholder in Rea, and Well’s officers are a majority on Rea’s board of directors. Rea reported net income of $500,000 for Year 2, and paid dividends of $150,000. In its December 31, Year 2, balance sheet, what amount should Well report as investment in Rea?

a. $450,000
b. $435,000
c. $400,000
d. $385,000

4. On January 1, Year 4, Barton Corporation acquired as a long-term investment for $500,000, a 30% common stock interest in Buffer Company. On that date, Buffer had net assets with a book value and current market value of $1,600,000. During Year 4 Buffer reported net income of $180,000 and declared and paid cash dividends of $40,000. What is the amount of income that Barton should report from this investment for Year 4?

a. $12,000.
b. $42,000.
c. $53,500.
d. $54,000.

5. Sage, Inc., bought 40% of Adams Corp.’s outstanding common stock on January 2, Year 2, for $400,000. The carrying amount of Adams’ net assets at the purchase date totaled $900,000. Fair values and carrying amounts were the same for all items except for plant and inventory, for which fair values exceeded their carrying amounts by $90,000 and $10,000, respectively. The plant has an 18-year life. All inventory was sold during Year 2. During Year 2, Adams reported net income of $120,000 and paid a $20,000 cash dividend. What amount should Sage report in its income statement from its investment in Adams for the year ended December 31, Year 2?

a. $48,000
b. $42,000
c. $36,000
d. $32,000

6. Park Co. uses the equity method to account for its January 1, Year 4, purchase of Tun Inc.’s common stock. On January 1, Year 4, the fair values of Tun’s FIFO inventory and land exceeded their carrying amounts. How do these excesses of fair values over carrying amounts affect Park’s reported equity in Tun’s Year 4 earnings?

<table>
<thead>
<tr>
<th>Inventory excess</th>
<th>Land excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Decrease</td>
<td>Decrease</td>
</tr>
<tr>
<td>b. Decrease</td>
<td>No effect</td>
</tr>
<tr>
<td>c. Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>d. Increase</td>
<td>No effect</td>
</tr>
</tbody>
</table>
Items 7 through 9 are based on the following:

Grant, Inc. acquired 30% of South Co.'s voting stock for $200,000 on January 2, Year 2. Grant's 30% interest in South gave Grant the ability to exercise significant influence over South's operating and financial policies. During Year 2, South earned $80,000 and paid dividends of $50,000. South reported earnings of $100,000 for the six months ended June 30, Year 3, and $200,000 for the year ended December 31, Year 3. On July 1, Year 3, Grant sold half of its stock in South for $150,000 cash. South paid dividends of $60,000 on October 1, Year 3.

7. Before income taxes, what amount should Grant include in its Year 2 income statement as a result of the investment?
   a. $15,000
   b. $24,000
   c. $50,000
   d. $80,000

8. In Grant's December 31, Year 2, balance sheet, what should be the carrying amount of this investment?
   a. $200,000
   b. $209,000
   c. $224,000
   d. $230,000

9. In its Year 3 income statement, what amount should Grant report as gain from the sale of half of its investment?
   a. $24,500
   b. $30,500
   c. $35,000
   d. $45,500

10. Moss Corp. owns 20% of Dubro Corp.'s preferred stock and 80% of its common stock. Dubro's stock outstanding at December 31, Year 2, is as follows:
   10% cumulative preferred stock $100,000
   Common stock 700,000

Dubro reported net income of $60,000 for the year ended December 31, Year 2. What amount should Moss record as equity in earnings of Dubro for the year ended December 31, Year 2?
   a. $42,000
   b. $48,000
   c. $48,400
   d. $50,000

11. On January 1, Year 2, Mega Corp. acquired 10% of the outstanding voting stock of Penny, Inc. On January 2, Year 3, Mega gained the ability to exercise significant influence over financial and operating control of Penny by acquiring an additional 20% of Penny's outstanding stock. The two purchases were made at prices proportionate to the value assigned to Penny's net assets, which equaled their carrying amounts. For the years ended December 31, Year 2 and Year 3, Penny reported the following:

<table>
<thead>
<tr>
<th>Year</th>
<th>Dividends paid</th>
<th>Net income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2</td>
<td>$200,000</td>
<td>$600,000</td>
</tr>
<tr>
<td>Year 3</td>
<td>$300,000</td>
<td>$650,000</td>
</tr>
</tbody>
</table>

In Year 3, what amounts should Mega report as current year investment income and as an adjustment, before income taxes, to Year 2 investment income?

<table>
<thead>
<tr>
<th>Year 3 Adjustment to investment</th>
<th>Year 2 investment income</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $195,000</td>
<td>$160,000</td>
</tr>
<tr>
<td>b. $195,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>c. $195,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>d. $105,000</td>
<td>$40,000</td>
</tr>
</tbody>
</table>

12. When the equity method is used to account for investments in common stock, which of the following affect(s) the investor's reported investment income?
   A change in market value
   Cash dividends from investee
   a. Yes Yes
   b. Yes No
   c. No Yes
   d. No No

CONSOLIDATION—GOODWILL

13. Penn Corp. paid $300,000 for the outstanding common stock of Star Co. At that time, Star had the following condensed balance sheet:

<table>
<thead>
<tr>
<th>Current assets</th>
<th>$ 40,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant and equipment, net</td>
<td>380,000</td>
</tr>
<tr>
<td>Liabilities</td>
<td>200,000</td>
</tr>
<tr>
<td>Stockholders’ equity</td>
<td>220,000</td>
</tr>
</tbody>
</table>

The fair value of the plant and equipment was $60,000 more than its recorded carrying amount. The
fair values and carrying amounts were equal for all other assets and liabilities.

In addition, Penn paid $20,000 in accounting, attorney and investment banker fees directly associated with the acquisition.

What amount of goodwill, related to Star’s acquisition, should Penn report in its consolidated balance sheet?

a. $20,000  
b. $40,000  
c. $60,000  
d. $80,000

14. On April 1, Year 4, Dart Co. paid $620,000 for all the issued and outstanding common stock of Wall Corp. in a transaction properly accounted for as a purchase. The recorded assets and liabilities of Wall Corp. on April 1, Year 4, follow:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 60,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>180,000</td>
</tr>
<tr>
<td>Property and equipment (net of accumulated depreciation of $220,000)</td>
<td>320,000</td>
</tr>
<tr>
<td>Goodwill (net of accumulated amortization of $50,000)</td>
<td>100,000</td>
</tr>
<tr>
<td>Liabilities</td>
<td>(120,000)</td>
</tr>
<tr>
<td>Net assets</td>
<td>$540,000</td>
</tr>
</tbody>
</table>

On April 1, Year 4, Wall's inventory had a fair value of $150,000, and the property and equipment (net) had a fair value of $380,000. What is the amount of goodwill resulting from the business combination?

a. $150,000  
b. $120,000  
c. $50,000  
d. $20,000

15. On June 30, Year 4, Needle Corporation purchased for cash at $10 per share all 100,000 shares of the outstanding common stock of Thread Company. The total appraised value of identifiable assets less liabilities of Thread was $1,400,000 at June 30, Year 4, including the appraised value of Thread's property, plant, and equipment (its only noncurrent asset) of $250,000. The consolidated financial statement of Needle Corporation and its wholly owned subsidiary at June 30, Year 4, should reflect

a. An extraordinary gain of $150,000.  
b. An ordinary gain of $400,000.  
c. An extraordinary gain of $400,000.  
d. Goodwill of $400,000.

16. In a business combination accounted for as a purchase, the appraisal values of the identifiable assets acquired exceeds the acquisition price. The excess appraisal value should be reported as a

a. Deferred credit.  
b. Reduction of the values assigned to current assets and a deferred credit for any unallocated portion.  
c. Gain on bargain purchase.  
d. Pro rata reduction of the values assigned to current and noncurrent assets.

CONSIDERATION THEORY

17. Which of the following is the best theoretical justification for consolidated financial statements?

a. In form the companies are one entity; in substance they are separate.  
b. In form the companies are separate; in substance they are one entity.  
c. In form and substance the companies are one entity.  
d. In form and substance the companies are separate.

18. When a parent-subsidiary relationship exists, consolidated financial statements are prepared in recognition of the accounting concept of

a. Reliability.  
b. Materiality.  
c. Legal entity.  
d. Economic entity.

19. Company X acquired for cash all of the outstanding common stock of Company Y. How should Company X determine in general the amounts to be reported for the inventories and long-term debt acquired from Company Y?

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventories</td>
<td>Fair value</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>Fair value</td>
</tr>
<tr>
<td>a. Fair value</td>
<td>Fair value</td>
</tr>
<tr>
<td>b. Fair value</td>
<td>Recorded value</td>
</tr>
<tr>
<td>c. Recorded value</td>
<td>Fair value</td>
</tr>
<tr>
<td>d. Recorded value</td>
<td>Recorded value</td>
</tr>
</tbody>
</table>

20. Company J acquired all of the outstanding common stock of Company K in exchange for cash. The acquisition price exceeds the fair value of net assets acquired. How should Company J determine the amounts to be reported for the plant and equipment and long-term debt acquired from Company K?
Plant and equipment | Long-term debt
---|---
a. K's carrying amount | K's carrying amount
b. K's carrying amount | Fair value
c. Fair value | K's carrying amount
d. Fair value | Fair value

**INTERCOMPANY RECEIVABLES**

21. Shep Co. has a receivable from its parent, Pep Co. Should this receivable be separately reported in Shep's balance sheet and in Pep's consolidated balance sheet?

<table>
<thead>
<tr>
<th>Shep's balance sheet</th>
<th>Pep's consolidated balance sheet</th>
</tr>
</thead>
</table>
a. Yes | No |
b. Yes | Yes |
c. No | No |
d. No | Yes |

22. Wright Corp. has several subsidiaries that are included in its consolidated financial statements. In its December 31, Year 3, trial balance, Wright had the following intercompany balances before eliminations:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current receivable due from Main Co.</td>
<td>$32,000</td>
</tr>
<tr>
<td>Noncurrent receivable from Main</td>
<td>$114,000</td>
</tr>
<tr>
<td>Cash advance to Corn Corp.</td>
<td>$6,000</td>
</tr>
<tr>
<td>Cash advance to King Co.</td>
<td>$15,000</td>
</tr>
<tr>
<td>Intercompany payable to King</td>
<td>$101,000</td>
</tr>
</tbody>
</table>

In its December 31, Year 3, consolidated balance sheet, what amount should Wright report as intercompany receivables?

a. $152,000
b. $146,000
c. $36,000
d. $0

**INTERCOMPANY INVENTORY**

23. Parker Corp. owns 80% of Smith Inc.'s common stock. During Year 3, Parker sold Smith $250,000 of inventory on the same terms as sales made to third parties. Smith sold all of the inventory purchased from Parker in Year 3. The following information pertains to Smith and Parker's sales for Year 3:

<table>
<thead>
<tr>
<th>Parker</th>
<th>Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>$400,000</td>
</tr>
<tr>
<td>Revenues</td>
<td>$600,000</td>
</tr>
</tbody>
</table>

What amount should Parker report as cost of sales in its Year 3 consolidated income statement?

a. $750,000
b. $680,000
c. $500,000
d. $430,000

24. Clark Co. had the following transactions with affiliated parties during Year 4:

- Sales of $60,000 to Dean, Inc., with $20,000 gross profit. Dean had $15,000 of this inventory on hand at year end. Clark owns a 15% interest in Dean and does not exert significant influence.
- Purchases of raw materials totaling $240,000 from Kent Corp., a wholly-owned subsidiary. Kent’s gross profit on the sale was $48,000. Clark had $60,000 of this inventory remaining on December 31, Year 4.

Before eliminating entries, Clark had consolidated current assets of $320,000. What amount should Clark report in its December 31, Year 4, consolidated balance sheet for current assets?

a. $320,000
b. $317,000
c. $308,000
d. $303,000

**Items 25 through 27** are based on the following:

Selected information from the separate and consolidated balance sheets and income statements of Pare, Inc. and its subsidiary, Shel Co., as of December 31, Year 2, and for the year then ended is as follows:

<table>
<thead>
<tr>
<th>Balance sheet accounts</th>
<th>Pare</th>
<th>Shel</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$52,000</td>
<td>$38,000</td>
<td>$78,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>60,000</td>
<td>50,000</td>
<td>104,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income statement accounts</th>
<th>Pare</th>
<th>Shel</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$400,000</td>
<td>$280,000</td>
<td>$616,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>300,000</td>
<td>220,000</td>
<td>462,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>100,000</td>
<td>60,000</td>
<td>154,000</td>
</tr>
</tbody>
</table>
During Year 2, Pare sold goods to Shel at the same markup on cost that Pare uses for all sales.

25. What was the amount of intercompany sales from Pare to Shel during Year 2?
   a. $6,000  
   b. $12,000  
   c. $58,000  
   d. $64,000

26. At December 31, Year 2, what was the amount of Shel's payable to Pare for intercompany sales?
   a. $6,000  
   b. $12,000  
   c. $58,000  
   d. $64,000

27. In Pare's consolidating worksheet, what amount of unrealized intercompany profit was eliminated?
   a. $6,000  
   b. $12,000  
   c. $58,000  
   d. $64,000

INTERCOMPANY EQUIPMENT

28. On January 1, Year 2, Poe Corp. sold a machine for $900,000 to Saxe Corp., its wholly-owned subsidiary. Poe paid $1,100,000 for this machine, which had accumulated depreciation of $250,000. Poe estimated a $100,000 salvage value and depreciated the machine on the straight-line method over 20 years, a policy which Saxe continued. In Poe's December 31, Year 2, consolidated balance sheet, this machine should be included in cost and accumulated depreciation as

<table>
<thead>
<tr>
<th>Cost</th>
<th>Accumulated depreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,100,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>$1,100,000</td>
<td>$290,000</td>
</tr>
<tr>
<td>$900,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>$850,000</td>
<td>$42,500</td>
</tr>
</tbody>
</table>

29. Port Inc., owns 100% of Salem Inc. On January 1, Year 3, Port sold Salem delivery equipment at a gain. Port had owned the equipment for two years and used a five-year straight-line depreciation rate with no residual value. Salem is using a three-year straight-line depreciation rate with no residual value for the equipment. In the consolidated income statement, Salem’s recorded depreciation expense on the equipment for Year 3 will be decreased by

   a. 20% of the gain on sale.  
   b. 33 1/3% of the gain on sale.  
   c. 50% of the gain on the sale.  
   d. 100% of the gain on the sale.

Items 30 and 31 are based on the following:

Scroll, Inc., a wholly owned subsidiary of Pirn, Inc., began operations on January 1, Year 4. The following information is from the condensed Year 4 income statements of Pirn and Scroll:

<table>
<thead>
<tr>
<th>Pirn</th>
<th>Scroll</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales to Scroll</td>
<td>$100,000</td>
</tr>
<tr>
<td>Sales to others</td>
<td>400,000</td>
</tr>
<tr>
<td></td>
<td>500,000</td>
</tr>
<tr>
<td>Cost of goods sold:</td>
<td>Acquired from Pirn</td>
</tr>
<tr>
<td></td>
<td>Acquired from others</td>
</tr>
<tr>
<td>Gross profit</td>
<td>150,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>40,000</td>
</tr>
<tr>
<td>Other expenses</td>
<td>60,000</td>
</tr>
<tr>
<td>Income from operations</td>
<td>50,000</td>
</tr>
<tr>
<td>Gain on sale of equipment to Scroll</td>
<td>12,000</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>$ 38,000</td>
</tr>
</tbody>
</table>

Additional information:
- Sales by Pirn to Scroll are made on the same terms as those made to third parties.
- Equipment purchased by Scroll from Pirn for $36,000 on January 1, Year 4, is depreciated using the straight-line method over four years.

30. In Pirn’s December 31, Year 3, consolidating worksheet, how much intercompany profit should be eliminated from Scroll’s inventory?
   a. $30,000  
   b. $20,000  
   c. $10,000  
   d. $6,000

31. What amount should be reported as depreciation expenses in Pirn’s Year 3 consolidated income statement?
   a. $50,000  
   b. $47,000  
   c. $44,000  
   d. $41,000
INTERCOMPANY BONDS

32. P Co. purchased term bonds at a premium on the open market. These bonds represented 20 percent of the outstanding class of bonds issued at a discount by S Co., P’s wholly owned subsidiary. P intends to hold the bonds until maturity. In a consolidated balance sheet, the difference between the bond carrying amounts in the two companies would be
a. Included as a decrease to retained earnings.
b. Included as an increase to retained earnings.
c. Reported as a deferred debit to be amortized over the remaining life of the bonds.
d. Reported as a deferred credit to be amortized over the remaining life of the bonds.

33. Wagner, a holder of a $1,000,000 Palmer, Inc., bond, collected the interest due on March 31, Year 3, and then sold the bond to Seal, Inc., for $975,000. On that date, Palmer, a 75% owner of Seal, had a $1,075,000 carrying amount for this bond. What was the effect of Seal’s purchase of Palmer’s bond on the retained earnings and minority interest amounts reported in Palmer’s March 31, Year 3, consolidated balance sheet?

Retained earnings Minority interest
a. $100,000 increase $0
b. $75,000 increase $25,000 increase
c. $0 $25,000 increase
d. $0 $100,000 increase

INTERCOMPANY STOCK

34. Sun, Inc. is a wholly-owned subsidiary of Patton, Inc. On June 1, Year 4, Patton declared and paid a $1 per share cash dividend to stockholders of record on May 15, Year 4. On May 1, Year 4, Sun bought 10,000 shares of Patton's common stock for $700,000 on the open market, when the book value per share was $30. What amount of gain should Patton report from this transaction in its consolidated income statement for the year ended December 31, Year 4?

a. $0
b. $390,000
c. $400,000
d. $410,000

MINORITY INTEREST

Items 35 through 37 are based on the following:
On January 2, Year 2, Pare Co. purchased 75% of Kidd Co.’s outstanding common stock. Selected balance sheet data at December 31, Year 2, is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Pare</th>
<th>Kidd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>$420,000</td>
<td>$180,000</td>
</tr>
<tr>
<td>Liabilities</td>
<td>$120,000</td>
<td>$ 60,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>100,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>200,000</td>
<td>70,000</td>
</tr>
<tr>
<td></td>
<td>$420,000</td>
<td>$180,000</td>
</tr>
</tbody>
</table>

During Year 2, Pare and Kidd paid cash dividends of $25,000 and $5,000, respectively, to their shareholders. There were no other intercompany transactions.

35. In its December 31, Year 2, consolidated statement of retained earnings, what amount should Pare report as dividends paid?

a. $5,000
b. $25,000
c. $26,250
d. $30,000

36. In Pare's December 31, Year 2, consolidated balance sheet, what amount should be reported as minority interest in net assets?

a. $0
b. $30,000
c. $45,000
d. $105,000

37. In its Dec. 31, Year 2, consolidated balance sheet, what amount should Pare report as common stock?

a. $50,000
b. $100,000
c. $137,500
d. $150,000

38. A 70%-owned subsidiary company declares and pays a cash dividend. What effect does the dividend have on the retained earnings and minority interest balances in the parent company’s consolidated balance sheet?

a. No effect on either retained earnings or minority interest.
b. No effect on retained earnings and a decrease in minority interest.
c. Decreases in both retained earnings and minority interest.
d. A decrease in retained earnings and no effect on minority interest.
CONSOLIDATED INCOME
39. On September 1, Year 2, Phillips, Inc., issued common stock in exchange for 20% of Sago, Inc.’s outstanding common stock. On July 1, Year 4, Phillips issued common stock for an additional 75% of Sago’s outstanding common stock. Sago continues in existence as Phillips’ subsidiary. How much of Sago’s Year 4 net income should be reported as accruing to Phillips?
   a. 20% of Sago’s net income to June 30 and all of Sago’s net income from July 1 to December 31.
   b. 20% of Sago’s net income to June 30 and 95% of Sago’s net income from July 1 to December 31.
   c. 95% of Sago’s net income.
   d. All of Sago’s net income.

CONSOLIDATED RETAINED EARNINGS
40. On June 30, Year 2, Pane Corp. exchanged 150,000 shares of its $20 par value common stock for all of Sky Corp.’s common stock. At that date, the fair value of Pane’s common stock issued was equal to the book value of Sky’s net assets. Both corporations continued to operate as separate businesses, maintaining accounting records with years ending December 31. Information from separate company operations follows:

<table>
<thead>
<tr>
<th>Pane</th>
<th>Sky</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained earnings—12/31/YR2</td>
<td>$3,200,000</td>
</tr>
<tr>
<td>Net income—six months ended 6/30/YR3</td>
<td>800,000</td>
</tr>
<tr>
<td>Dividends paid—3/25/YR3</td>
<td>750,000</td>
</tr>
</tbody>
</table>

If the business combination is accounted for as a purchase, what amount of retained earnings would Pane report in its June 30, Year 3, consolidated balance sheet?
   a. $5,200,000
   b. $4,450,000
   c. $3,525,000
   d. $3,250,000

41. Poe, Inc. acquired 100% of Shaw Co. in a business combination on September 30, Year 4. During Year 4, Poe declared quarterly dividends of $25,000 and Shaw declared quarterly dividends of $10,000. What amount should be reported as dividends declared in the December 31, Year 4, consolidated statement of retained earnings?
   a. $100,000
   b. $120,000
   c. $130,000
   d. $135,000

SUMMARY PROBLEM
Items 42 through 46 are based on the following:
The separate condensed balance sheets and income statements of Purl Corp. and its wholly-owned subsidiary, Scott Corp., are as follows:

BALANCE SHEETS
December 31, Year 4

<table>
<thead>
<tr>
<th>Assets</th>
<th>Purl</th>
<th>Scott</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$80,000</td>
<td>$60,000</td>
</tr>
<tr>
<td>Accounts receivable (net)</td>
<td>140,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Inventories</td>
<td>90,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Total current assets</td>
<td>310,000</td>
<td>135,000</td>
</tr>
<tr>
<td>Property, plant, and equipment (net)</td>
<td>625,000</td>
<td>280,000</td>
</tr>
<tr>
<td>Investment in Scott (equity method)</td>
<td>390,000</td>
<td>—</td>
</tr>
<tr>
<td>Total assets</td>
<td>$1,325,000</td>
<td>$415,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and Stockholders' Equity</th>
<th>Purl</th>
<th>Scott</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$160,000</td>
<td>$95,000</td>
</tr>
<tr>
<td>Accrued liabilities</td>
<td>110,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>270,000</td>
<td>125,000</td>
</tr>
<tr>
<td>Stockholders' equity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock ($10 par)</td>
<td>300,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>—</td>
<td>10,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>755,000</td>
<td>230,000</td>
</tr>
<tr>
<td>Total stockholders' equity</td>
<td>1,055,000</td>
<td>290,000</td>
</tr>
<tr>
<td>Total liabilities and stockholders' equity</td>
<td>$1,325,000</td>
<td>$415,000</td>
</tr>
</tbody>
</table>

INCOME STATEMENTS
For the Year Ended December 31, Year 4

<table>
<thead>
<tr>
<th></th>
<th>Purl</th>
<th>Scott</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$2,000,000</td>
<td>$750,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>1,540,000</td>
<td>500,000</td>
</tr>
<tr>
<td>Gross margin</td>
<td>460,000</td>
<td>250,000</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>260,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Operating income</td>
<td>200,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Equity in earnings of Scott</td>
<td>60,000</td>
<td>—</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>260,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Provision for income taxes</td>
<td>60,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Net income</td>
<td>$200,000</td>
<td>$70,000</td>
</tr>
</tbody>
</table>
Additional information:

- On January 1, Year 4, Purl purchased for $360,000 all of Scott's $10 par, voting common stock. On January 1, Year 4, the fair value of Scott's assets and liabilities equaled their carrying amount of $410,000 and $160,000, respectively, except that the fair values of certain items identifiable in Scott's inventory were $10,000 more than their carrying amounts. These items were still on hand at December 31, Year 4. An impairment test at the end of the year indicated that goodwill had lost 1/10 of its value.
- During Year 4, Purl and Scott paid cash dividends of $100,000 and $30,000, respectively. For tax purposes, Purl receives the 100% exclusion for dividends received from Scott.
- There were no intercompany transactions, except for Purl's receipt of dividends from Scott and Purl's recording of its share of Scott's earnings.
- Both Purl and Scott paid income taxes at the rate of 30%.

In the December 31, Year 4, consolidated financial statements of Purl and its subsidiary:

42. Total current assets should be
   a. $455,000  
   b. $445,000  
   c. $310,000  
   d. $135,000

43. Total assets should be
   a. $1,740,000  
   b. $1,450,000  
   c. $1,350,000  
   d. $1,325,000

44. Total retained earnings should be
   a. $985,000  
   b. $825,000  
   c. $795,000  
   d. $755,000

45. Net income should be
   a. $270,000  
   b. $200,000  
   c. $190,000  
   d. $170,000

46. Impairment loss-goodwill should be
   a. $20,000  
   b. $10,000  
   c. $6,000  
   d. $0

ACQUISITION COST

47. Ecol Corporation issued voting preferred stock with a fair value of $1,000,000 in exchange for all of the outstanding common stock of Ogee Service Company. Ogee has tangible net assets with a book value of $500,000 and a fair value of $600,000. In addition, Ecol Corporation issued stock valued at $100,000 to an investment banker as a "finder's fee" for arranging the combination. As a result of this combination Ecol Corporation should record an increase in net assets of
   a. $500,000.  
   b. $600,000.  
   c. $1,100,000.  
   d. $1,000,000.

48. On August 31, Year 3, Wood Corp. issued 100,000 shares of its $20 par value common stock for the net assets of Pine, Inc., in a business combination accounted for by the purchase method. The market value of Wood's common stock on August 31 was $36 per share. Internal secretarial and administrative costs of $60,000 are indirectly attributable to the acquisition. Costs of registering and issuing the equity securities amounted to $80,000. No goodwill was involved in the purchase. What amount should Wood capitalize as the cost of acquiring Pine’s net assets?
   a. $3,600,000  
   b. $3,680,000  
   c. $3,760,000  
   d. $3,840,000

49. A business combination is accounted for properly as a purchase. Direct costs of combination, other than registration and issuance costs of equity securities, should be
   a. Capitalized as a deferred charge and amortized.  
   b. Deducted directly from the retained earnings of the combined corporation.  
   c. Expensed in the period incurred.  
   d. Included in the acquisition cost to be allocated to identifiable assets according to their fair values.

COMBINED STATEMENTS

50. For which of the following reporting units is the preparation of combined financial statements most appropriate?
   a. A corporation and a majority-owned subsidiary with nonhomogeneous operations.  
   b. A corporation and a foreign subsidiary with nonintegrated homogeneous operations.
c. Several corporations with related operations with some common individual owners.

d. Several corporations with related operations owned by one individual.

51. Combined statements may be used to present the results of operations of

<table>
<thead>
<tr>
<th>Companies under common management</th>
<th>Commonly controlled companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>No</td>
</tr>
<tr>
<td>b.</td>
<td>Yes</td>
</tr>
<tr>
<td>c.</td>
<td>No</td>
</tr>
<tr>
<td>d.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

52. Mr. & Mrs. Dart own a majority of the outstanding capital stock of Wall Corp., Black Co., and West, Inc. During Year 2, Wall advanced cash to Black and West in the amount of $50,000 and $80,000, respectively. West advanced $70,000 in cash to Black. At December 31, Year 2, none of the advances was repaid. In the combined December 31, Year 2, balance sheet of these companies, what amount would be reported as receivables from affiliates?

a. $200,000
b. $130,000
c. $60,000
d. $0

53. Which of the following items should be treated in the same manner in both combined financial statements and consolidated statements?

<table>
<thead>
<tr>
<th>Income taxes</th>
<th>Minority interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

54. Ahm Corp. owns 90% of Bee Corp.’s common stock and 80% of Cee Corp.’s common stock. The remaining common shares of Bee and Cee are owned by their respective employees. Bee sells exclusively to Cee, Cee buys exclusively from Bee, and Cee sells exclusively to unrelated companies. Selected Year 3 information for Bee and Cee follows:

<table>
<thead>
<tr>
<th></th>
<th>Bee Corp.</th>
<th>Cee Corp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$130,000</td>
<td>$91,000</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>100,000</td>
<td>65,000</td>
</tr>
<tr>
<td>Beginning inventory</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Ending inventory</td>
<td>None</td>
<td>65,000</td>
</tr>
</tbody>
</table>

What amount should be reported as gross profit in Bee and Cee’s combined income statement for the year ended December 31, Year 3?

a. $26,000
b. $41,000
c. $47,800
d. $56,000

REVIEW QUESTIONS

55. Polk Corp. purchased a 30% interest in Irwin Corp. for an amount which reflects the fact that Irwin's depreciable assets have a market value in excess of their book value. In the separate statements of Polk, this difference should be

a. Charged against investment revenue over the remaining useful life of the assets.
b. Included in the carrying value of the investment until disposition of the stock.
c. Charged against investment revenue in the year of acquisition.
d. Charged to depreciation expense over the remaining useful life of the assets.

56. An investor uses the equity method to account for its 30% investment in common stock of an investee. Amortization of the investor's share of the excess of fair market value over book value of depreciable assets at the date of the purchase should be reported in the investor's income statement as part of

a. Other expense.
b. Depreciation expense.
c. Equity in earnings of investee.
d. Amortization of goodwill.

57. A parent corporation which uses the equity method of accounting for its investment in a 40% owned subsidiary, which earned $20,000 and paid $5,000 in dividends, made the following entries:

<table>
<thead>
<tr>
<th>Investment in subsidiary</th>
<th>$8,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity in earnings of subsidiary</td>
<td>$8,000</td>
</tr>
<tr>
<td>Cash</td>
<td>2,000</td>
</tr>
<tr>
<td>Dividend revenue</td>
<td>2,000</td>
</tr>
</tbody>
</table>

What effect will these entries have on the parent's statement of financial position?

a. Financial position will be fairly stated.
b. Investment in subsidiary overstated, retained earnings understated.
c. Investment in subsidiary understated, retained earnings understated.
d. Investment in subsidiary overstated, retained earnings overstated.
58. On November 30, Year 2, Parlor, Inc., purchased for cash at $15 per share all 250,000 shares of the outstanding common stock of Shaw Co. At November 30, Year 2, Shaw’s balance sheet showed a carrying amount of net assets of $3,000,000. At that date, the fair value of Shaw’s property, plant and equipment exceeded its carrying amount by $400,000. In its November 30, Year 2, consolidated balance sheet, what amount should Parlor report as goodwill?
   a. $750,000  
   b. $400,000  
   c. $350,000  
   d. $0

59. In a business combination accounted for as an acquisition, the appraised values of the identifiable assets acquired exceeded the acquisition price. How should the excess appraised value be reported?
   a. As a negative goodwill.  
   b. As additional paid-in capital.  
   c. As a reduction of the values assigned to noncurrent assets and any extraordinary gain unallocated portion.  
   d. A gain on a bargain purchase.

60. On June 30, Year 2, Purl Corp. issued 150,000 shares of its $20 par common stock for which it received all of Scott Corp.'s common stock. The fair value of the common stock issued is equal to the book value of Scott Corp.'s net assets. Both corporations continued to operate as separate businesses, maintaining accounting records with years ending Dec. 31. Net income from separate company operations and dividends paid were:

<table>
<thead>
<tr>
<th></th>
<th>Purl</th>
<th>Scott</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Six months ended 6/30/YR2</td>
<td>$750,000</td>
<td></td>
</tr>
<tr>
<td>Six months ended 12/31/YR2</td>
<td>825,000</td>
<td>375,000</td>
</tr>
<tr>
<td>Dividends paid March 25, Year 2</td>
<td>950,000</td>
<td></td>
</tr>
<tr>
<td>November 15, Year 2</td>
<td>—</td>
<td>300,000</td>
</tr>
</tbody>
</table>

On December 31, Year 2, Scott held in its inventory merchandise acquired from Purl on December 1, Year 2, for $150,000, which included a $45,000 markup.

Assume that the business combination qualifies for treatment as a purchase. In the Year 2 consolidated income statement, net income should be reported at
   a. $1,650,000  
   b. $1,905,000  
   c. $1,950,000  
   d. $2,130,000

Items 61 through 64 are based on the following:

Selected information from the separate and consolidated balance sheets and income statements of Pard, Inc. and its subsidiary, Spin Co. as of December 31, Year 4, and for the year then ended is as follows:

<table>
<thead>
<tr>
<th>Balance sheet accounts</th>
<th>Pard</th>
<th>Spin</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$26,000</td>
<td>$19,000</td>
<td>$39,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>30,000</td>
<td>25,000</td>
<td>52,000</td>
</tr>
<tr>
<td>Investment in Spin</td>
<td>67,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Goodwill</td>
<td>—</td>
<td>—</td>
<td>30,000</td>
</tr>
<tr>
<td>Minority interest</td>
<td>—</td>
<td>—</td>
<td>10,000</td>
</tr>
<tr>
<td>Stockholders’ equity</td>
<td>154,000</td>
<td>50,000</td>
<td>154,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income statement accounts</th>
<th>Pard</th>
<th>Spin</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$200,000</td>
<td>$140,000</td>
<td>$308,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>150,000</td>
<td>110,000</td>
<td>231,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>50,000</td>
<td>30,000</td>
<td>77,000</td>
</tr>
<tr>
<td>Equity in earnings of Spin</td>
<td>11,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Amortization of goodwill</td>
<td>—</td>
<td>—</td>
<td>2,000</td>
</tr>
<tr>
<td>Net income</td>
<td>36,000</td>
<td>20,000</td>
<td>40,000</td>
</tr>
</tbody>
</table>

Additional information:
- During Year 4, Pard sold goods to Spin at the same markup on cost that Pard uses for all sales. At December 31, Year 4, Spin had not paid for all of these goods and still held 37.5% of them in inventory.

61. What was the amount of intercompany sales from Pard to Spin during Year 4?
   a. $3,000  
   b. $6,000  
   c. $29,000  
   d. $32,000

62. At December 31, Year 4, what was the amount of Spin’s payable to Pard for intercompany sales?
   a. $3,000  
   b. $6,000  
   c. $29,000  
   d. $32,000
63. In Pard’s consolidated balance sheet, what was the carrying amount of the inventory that Spin purchased from Pard?
   a. $3,000  
   b. $6,000  
   c. $9,000  
   d. $12,000

64. What is the percent of minority interest ownership in Spin?
   a. 10%  
   b. 20%  
   c. 25%  
   d. 45%  

67. Band Co. uses the equity method to account for its investment in Guard, Inc. common stock. How should Band record a 2% stock dividend received from Guard?
   a. As dividend revenue at Guard’s carrying value of the stock.  
   b. As dividend revenue at the market value of the stock.  
   c. As a reduction in the total cost of Guard stock  
   d. As a memorandum entry reducing the unit cost of all Guard stock owned.  

68. Birk co. purchased 30% of Sled Co.’s outstanding common stock on December 31, Year 2, for $200,000. On that date, Sled’s stockholders’ equity was $500,000, and its fair value of its identifiable net assets was $600,000. On December 31, Year 2, what amount of good will should Birk attribute to his acquisition?
   a. $0  
   b. $20,000  
   c. $30,000  
   d. $50,000  

69. On September 29, Year 3, Wall Co. paid $860,000 for all the issued and outstanding common stock of Hart Corp. On that date, the carrying amounts of Hart’s recorded assets and liabilities had fair values of $840,000 and $140,000, respectively. In Wall’s September 30, Year 3, balance sheet, what amount should be reported as goodwill?
   a. $20,000  
   b. $160,000  
   c. $180,000  
   d. $240,000  

70. A business combination is accounted for as an acquisition. Which of the following expenses related to the business combination should be included, in total, in the determination of net income of the combined corporation for the period in which the expenses are incurred?

<table>
<thead>
<tr>
<th>Fees of finders and consultants</th>
<th>Registration fees for equity securities issued</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

Items 65 and 66 are based on the following:
Nolan owns 100% of the capital stock of both Twill Corp. and Webb Corp. Twill purchases merchandise inventory from Webb at 140% of Webb’s cost. During Year 3, merchandise that cost Webb $40,000 was sold to Twill. Twill sold all of this merchandise to unrelated customers for $81,200 during Year 3. In preparing combined financial statements for Year 3, Nolan’s bookkeeper disregarded the common ownership of Twill and Webb.

65. By what amount was unadjusted revenue overstated in the combined income statement for Year 3?
   a. $16,000  
   b. $40,000  
   c. $56,000  
   d. $81,200

66. What amount should be eliminated from cost of goods sold in the combined income statement for Year 3?
   a. $56,000  
   b. $40,000  
   c. $24,000  
   d. $16,000
71. Plack Co. purchased 10,000 shares (2% ownership) of Ty Corp. on February 14, Year 2. Plack received a stock dividend of 2,000 shares on April 30, Year 2, when the market value per share was $35. Ty paid a cash dividend of $2 per share on December 15, Year 2. In its Year 2 income statement, what amount should Plack report as dividend income?
   a. $20,000  
   b. $24,000  
   c. $90,000  
   d. $94,000

72. Puff Co. acquired 40% of Straw, Inc.’s voting common stock on January 2, Year 3, for $400,000. The carrying amount of Straw’s net assets at the purchase date totaled $900,000. Fair values equaled carrying amounts for all items except equipment, for which fair values exceeded carrying amounts by $100,000. The equipment has a five-year life. During Year 3, Straw reported net income of $150,000. What amount of income from this investment should Puff report in its Year 3 income statement?
   a. $40,000  
   b. $52,000  
   c. $56,000  
   d. $60,000

**IFRS**

73. Which of the following consolidations methods is approved by IFRS?
   a. Purchase method.  
   b. Acquisition method.  
   c. Pooling of interest.  
   d. Purchase method excluding goodwill in non-controlling interest.

74. Which of the following consolidation methods is approved by IFRS but is not acceptable under US GAAP?
   a. Proportionate-share method.  
   b. Pooling of interest.  
   c. Purchase method with a proportionate share of goodwill allocates to non-controlling interest.  
   d. Purchase method

75. Given the following data, calculate the amount of goodwill impairment under IFRS:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill</td>
<td>$1,000</td>
</tr>
<tr>
<td>Fair value</td>
<td>$7,000</td>
</tr>
<tr>
<td>Book value including goodwill</td>
<td>$5,000</td>
</tr>
<tr>
<td>Fair value of Identifiable net assets</td>
<td>$5,500</td>
</tr>
</tbody>
</table>

   a. $1,500.  
   b. $1,000  
   c. -0-  
   d. $2,000

76. Given the following data, calculate the amount of goodwill impairment under IFRS.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill</td>
<td>$1,000</td>
</tr>
<tr>
<td>Fair value</td>
<td>$9,000</td>
</tr>
<tr>
<td>Book value including goodwill</td>
<td>$9,400</td>
</tr>
<tr>
<td>Fair value of Identifiable net assets</td>
<td>$8,500</td>
</tr>
</tbody>
</table>

   a. -0-  
   b. $400 loss  
   c. $200 loss  
   d. $1,000 loss

77. Using the same data as in question #76. Calculate the amount reported for goodwill on the consolidated balance sheet after the recording of the goodwill impairment.
   a. $1,000  
   b. $400  
   c. $500  
   d. $600

78. The goodwill impairment loss is recognized on the financial statements as a part of
   a. Comprehensive income  
   b. Selling expenses  
   c. Operating income  
   d. Other revenues/other expenses

79. Under the proportionate-share consolidation method which is acceptable under IFRS, what is the amount allocated to the non-controlling interest at the acquisition date?
   a. Its share of the acquisition date fair values excluding goodwill.  
   b. Its share of the acquisition-date fair value.  
   c. Its share of the acquisition-date fair values including goodwill.  
   d. Its share of the acquisition-date carrying value.
80. Under IFRS, if a company uses the proportionate-share consolidation method, the effect on the statement of financial position (Balance Sheet) is that it would report
a. Goodwill including the parent's share and the non-controlling interest share.
b. Goodwill including only the non-controlling interest share of goodwill.
c. The carrying value of the goodwill at the acquisition date.
d. Reports only the parent's share of goodwill.

The following data apply to questions 81 and 82:
ABC buys a 90% interest in XYZ Company on January 1, year 5, for $900,000. The total value of XYZ on that date was $1,000,000 and the value of its net identifiable assets was $950,000.

81. What would ABC report on the consolidated balance sheet for goodwill at January 1, Year 5 assuming ABC uses the acquisition method of consolidation approved by IFRS?
a. $100,000  
b. $50,000  
c. $45,000  
d. -0-

82. What would the amount of goodwill reported on the consolidated balance sheet assuming that ABC used the IFRS approved proportionate-share method?
a. $100,000  
b. $50,000  
c. $45,000  
d. -0-
Chapter Four
Consolidated Financial Statements Problems

NUMBER 1
("Other Objective Answer Format")

Presented below are selected amounts from the separate unconsolidated financial statements of Poe Corp. and its 90%-owned subsidiary, Shaw Co., at December 31, Year 6. Additional information follows:

<table>
<thead>
<tr>
<th></th>
<th>Poe</th>
<th>Shaw</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Selected income statement amounts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>$710,000</td>
<td>$530,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>490,000</td>
<td>370,000</td>
</tr>
<tr>
<td>Gain on sale of equipment</td>
<td>----</td>
<td>21,000</td>
</tr>
<tr>
<td>Earnings from investment in subsidiary</td>
<td>61,000</td>
<td>----</td>
</tr>
<tr>
<td>Interest expense</td>
<td>----</td>
<td>16,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>25,000</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Selected balance sheet amounts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$ 50,000</td>
<td>$ 15,000</td>
</tr>
<tr>
<td>Inventories</td>
<td>229,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>440,000</td>
<td>360,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(200,000)</td>
<td>(120,000)</td>
</tr>
<tr>
<td>Investment in Shaw</td>
<td>189,000</td>
<td>----</td>
</tr>
<tr>
<td>Investment in bonds</td>
<td>100,000</td>
<td>----</td>
</tr>
<tr>
<td>Discount on bonds</td>
<td>(9,000)</td>
<td>----</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>----</td>
<td>(200,000)</td>
</tr>
<tr>
<td>Common stock</td>
<td>(100,000)</td>
<td>(10,000)</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>(250,000)</td>
<td>(40,000)</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>(402,000)</td>
<td>(140,000)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Selected statement of retained earnings amounts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning balance, December 31, Year 5</td>
<td>$272,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Net income</td>
<td>210,000</td>
<td>70,000</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>80,000</td>
<td>30,000</td>
</tr>
</tbody>
</table>

**Additional information:**
- On January 2, Year 6, Poe, Inc. purchased 90% of Shaw Co.'s 100,000 outstanding common stock for cash of $155,000. On that date, Shaw's stockholders' equity equaled $150,000 and the fair values of Shaw's assets and liabilities equaled their carrying amount. An impairment test at the end of the year indicated that goodwill had lost $2,000 of its value.
- On September 4, Year 6, Shaw paid cash dividends of $30,000.
- On December 31, Year 6, Poe recorded its equity in Shaw's earnings.
Required:

a. **Items 1 through 3.** Items 1 through 3 below represent transactions between Poe and Shaw during Year 6. Determine the dollar amount effect of the consolidating adjustment on Year 6 consolidated income before considering minority interest. Ignore income tax considerations.

1. On January 3, Year 6, Shaw sold equipment with an original cost of $30,000 and a carrying value of $15,000 to Poe for $36,000. The equipment had a remaining life of three years and was depreciated using the straight-line method by both companies.

2. During Year 6, Shaw sold merchandise to Poe for $60,000, which included a profit of $20,000. At December 31, Year 6, half of this merchandise remained in Poe's inventory.

3. On December 31, Year 6, Poe paid $91,000 to purchase 50% of the outstanding bonds issued by Shaw. The bonds mature on December 31, Year 12, and were originally issued at par. The bonds pay interest annually on December 31 of each year, and the interest was paid to the prior investor immediately before Poe's purchase of the bonds.

b. **Items 4 through 15.** Items 4 through 15 below refer to accounts that may or may not be included in Poe and Shaw's consolidated financial statements. The list below refers to the various possibilities of those amounts to be reported in Poe's consolidated financial statements for the year ended December 31, Year 6. Consider all transactions stated in items 1 through 4 in determining your answer. Ignore income tax considerations.

**Items to be Answered:**
4. Cash
5. Equipment
6. Investment in subsidiary
7. Bonds payable
8. Minority interest
9. Common stock
10. Beginning retained earnings
11. Dividends paid
12. Gain on retirement of bonds
13. Cost of goods sold
14. Interest expense
15. Depreciation expense

**Responses to be Selected:**
A. Sum of amounts on Poe and Shaw's separate unconsolidated financial statements.
B. Less than the sum of amounts on Poe and Shaw's separate unconsolidated financial statements but not the same as the amount on either.
C. Same as amount for Poe only.
D. Same as amount for Shaw only.
E. Eliminated entirely in consolidation.
F. Shown in consolidated financial statements but not in separate unconsolidated financial statements.
G. Neither in consolidated nor in separate unconsolidated financial statements.
NUMBER 2
("Other Objective Answer Format")

On January 2, Year 4, Purl Co. purchased 90% of Strand Co.'s outstanding common stock at a purchase price that was in excess of Strand's stockholders' equity. On that date, the fair values of Strand's assets and liabilities equaled their carrying amounts. Purl has accounted for the acquisition as a purchase. Transactions during Year 4 were as follows:

- On February 15, Year 4, Strand sold equipment to Purl at a price higher than the equipment's carrying amount. The equipment had a remaining life of three years and was depreciated using the straight-line method by both companies.

- During Year 4, Purl sold merchandise to Strand under the same terms it offered to third parties. At December 31, Year 4, one-third of this merchandise remained in Strand's inventory.

- On November 15, Year 4, both Purl and Strand paid cash dividends to their respective stockholders.

- On December 31, Year 4, Purl recorded its equity in Strand's earnings.

Required:

Items 1 through 10 relate to accounts that may or may not be included in Purl and Strand's consolidated financial statements. This list below refers to the possible ways those accounts may be reported in Purl's consolidated financial statements for the year ended December 31, Year 4. For each item, select one corresponding letter. An answer may be selected once, more than once, or not at all.

Responses to be Selected:
A. Sum of the amounts on Purl and Strand's separate unconsolidated financial statements.
B. Less than the sum of the amounts on Purl and Strand's separate unconsolidated financial statements, but not the same as the amount on either separate unconsolidated financial statement.
C. Same as the amount for Purl only.
D. Same as the amount for Strand only.
E. Eliminated entirely in consolidation.
F. Shown in the consolidated financial statements but not in the separate unconsolidated financial statements.

Items to be Answered:
1. Cash.
2. Equipment.
3. Investment in subsidiary.
4. Minority interest.
7. Dividends paid.
8. Cost of goods sold.
9. Interest expense.
10. Depreciation expense.
Johnson, an investor in Acme Co., asked Smith, CPA for advice on the propriety of Acme's financial reporting for two of its investments. Smith obtained the following information related to the investments from Acme's December 31, Year 5, financial statements:

- 20% ownership interest in Kern Co., represented by 200,000 shares of outstanding common stock purchased on January 2, Year 5, for $600,000.
- 20% ownership interest in Wand Co., represented by 20,000 shares of outstanding common stock purchased on January 2, Year 5, for $300,000.
- On January 2, Year 5, the carrying values of the acquired shares of both investments equaled their purchase price.
- Kern reported earnings of $400,000 for the year ended December 31, Year 5, and declared and paid dividends of $100,000 during Year 5.
- Wand reported earnings of $350,000 for the year ended December 31, Year 5, and declared and paid dividends of $60,000 during Year 5.
- On December 31, Year 5, Kern's and Wand's common stock were trading over-the-counter at $18 and $20 per share, respectively.
- The investment in Kern is accounted for using the equity method.
- The investment in Wand is accounted for as available-for-sale securities.

Smith recalculated the amounts reported in Acme's December 31, Year 5, financial statements, and determined that they were correct. Stressing that the information available in the financial statements was limited, Smith advised Johnson that, assuming Acme properly applied generally accepted accounting principles, Acme may have appropriately used two different methods to account for its investments in Kern and Wand, even though the investments represent equal ownership interests.

Smith also informed Johnson that Acme had elected early application of Statement of Financial Accounting Standards No. 130, Reporting Comprehensive Income, beginning with the fiscal year ending December 31, Year 5.

Required:

a. Prepare a detailed memorandum from Smith to Johnson supporting Smith's conclusion that, under generally accepted accounting principles, correctly applied, Acme may have appropriately used two different methods to account for its investments representing equal ownership interests.

b. Prepare a schedule indicating the amount Acme should report for the two investments in its December 31, Year 5, balance sheet and statement of income and comprehensive income. Show all calculations. Ignore income taxes.
Chapter Four
Solutions to Consolidated Financial Statements
Questions

1. (d) $0 dividend revenue. Receipt of a stock dividend (usually) does not constitute dividend income to the investor, rather it reduces the cost basis per share of the investment. Therefore, the 400 shares received as a stock dividend from Parr Corp. would not be included in dividend income.

2. (b) Denver Corp. acquired 30% of Eagle Company’s outstanding common stock. With no evidence to the contrary, an investment of 20% or more is assumed to give significant influence, and would be accounted for using the equity method. Under the equity method the investor recognizes in income its share of the investee’s net income or loss subsequent to the date of acquisition.
   Investment income = $120,000 × 30% × 1/2 year = $18,000

3. (b) $435,000. The equity method of accounting for investments in common stock should be used if the investor has significant influence over the operating and financial policies of the investee. Well Company's significant influence is demonstrated in its officers being a majority of the investees' board of directors.

   | Original cost of investment | $400,000 |
   | Add: Share of income subsequent to acquisition | 50,000 |
   | Less: Dividend of investee | (15,000) |

4. (d) $54,000.
   Cost of investment $500,000
   FV of net assets purchased—30% × $1,600,000 480,000
   Goodwill $20,000
   Buffer's net income $180,000
   Barton's share (30% × $180,000) $54,000

   Note: Candidates may be confused because there is no mention of testing goodwill for impairment. SFAS 142 states that goodwill implicit in equity method investments will not be tested for impairment. However, like all assets, equity method investments (not just the goodwill portion) will be tested for permanent declines in value.

5. (b) $42,000 income from investment in Adams. Under the equity method the investor recognizes in income its share of the investee’s net income or loss subsequent to the date of acquisition. Furthermore, the investor should reflect adjustments which would be made in consolidation, based on the investor’s percentage ownership, if such adjustments (eliminations) can be recorded between investment income and the investment account.

   | Sage’s share of Adams’ net income (40% × $120,000) | $48,000 |
   | Less: Amortization of depreciable assets fair value in excess of book value | (2,000) |
   | Fair value of inventory in excess of book value charged to cost of goods sold | (4,000) |
   | Income from investment in Adams | $42,000 |

   There was no goodwill resulting from the investment.
Cost of investment $400,000

Fair value of net assets acquired

<table>
<thead>
<tr>
<th>Book value</th>
<th>$ 900,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value in excess of book value</td>
<td></td>
</tr>
<tr>
<td>Plant</td>
<td>90,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>10,000</td>
</tr>
<tr>
<td>Fair value of net assets</td>
<td>1,000,000</td>
</tr>
<tr>
<td>% acquired</td>
<td>$400,000</td>
</tr>
</tbody>
</table>

| Goodwill | $0 |

6. (b) Under the equity method, the investor should reflect adjustments which would be made in consolidation, based on the investor's percentage ownership, if such adjustment (eliminations) can be recorded between investment income and the investment account. The fair value of the FIFO inventory in excess of the carrying value would reduce net income of the investee, therefore, the investor would charge investment income and credit the investment account to reflect the decrease in income. The fair value of the land in excess of its carrying value would not affect income as it is not a depreciable asset. No adjustment would be made relative to the land.

7. (b) $24,000 Investment income. As Grant's investment gives it the ability to exercise significant influence over South's operating and financial policies, the equity method would be used to account for the investment. Grant's equity in South's income is $24,000 (30% x $80,000 income).

8. (b) $209,000 Investment carrying value at 12/31/YR2

- Original cost $200,000
- Add: Equity in South's income (#7) 24,000
- Less: Dividends received (30% x $50,000) (15,000)
- Carrying value 12/31/YR2 $209,000

9. (b) $30,500 Gain on sale of investment.

- Carrying value 12/31/YR2 (#8) $209,000
- Add: Equity in South's income 1/1 to 7/1/YR3 30% x $100,000 30,000
- Carrying value 7/1/YR3 $239,000
- 1/2 investment carrying value $119,500
- Sales proceeds on 1/2 of investment 150,000
- Gain on sale of investment $30,500

Note: As investment is now reduced to 15%, it will be accounted for by the cost method (assuming no significant influence).

10. (a) $42,000. When an investee has cumulative preferred stock outstanding, an investor should compute its share of investee's earnings after deducting the preferred dividends, whether or not such dividends are declared.

Equity in earnings applicable to common stock

| Net income | $60,000 |
| Less: Preferred dividends ($100,000 par x 10%) | 10,000 |
| Net income applicable to common stock | $50,000 |
| Moss' percentage ownership (common) | x 80% |
| Moss' equity in earning applicable to common stock | $40,000 |

Equity on earnings applicable to Preferred Stock

| Preferred dividend | $10,000 |
| Moss' percentage ownership (preferred) | x 20% |
| Moss' equity in Dubro's earnings | $42,000 |
11. (c) $195,000 and $40,000.

**Year 3 investment income:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penny’s Year 3 net income</td>
<td>$650,000</td>
</tr>
<tr>
<td>Mega’s percentage ownership (10% + 20%)</td>
<td>× 30%</td>
</tr>
<tr>
<td>Mega’s Year 3 investment income</td>
<td>$195,000</td>
</tr>
</tbody>
</table>

Because Mega Corp. can exercise “significant influence” over the financial and operating activities of Penny, Inc., it should report its investment and investment income (re: Penny) using the equity method.

**Adjustments to Year 2 investment income:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penny’s Year 2 net income</td>
<td>$600,000</td>
</tr>
<tr>
<td>Dividend paid by Penny—Year 2</td>
<td>(200,000)</td>
</tr>
<tr>
<td>Penny’s Year 2 undistributed net income</td>
<td>$400,000</td>
</tr>
<tr>
<td>Mega’s percentage ownership Year 2</td>
<td>10%</td>
</tr>
<tr>
<td>Mega’s equity in Year 2 undistributed income</td>
<td>$ 40,000</td>
</tr>
</tbody>
</table>

The change from the cost method to the equity method should be made retroactively, restating all prior periods in which the investment was held as if the equity method were used from inception.

12. (d) Neither a change in market value of investee's common stock nor cash dividends from investee affect the investor's reported investment income (equity in earnings of investee) under the equity method. Under the equity method, cash dividends would be charged against (reduce) the investment account and have no effect on income. A change in the market value of the investee's common stock would not be recorded under the equity method unless the change were judged a permanent and substantial decline, and then the decline would be charged to a loss account rather than investment income. FAS #115 (chapter 2) does not apply to investments accounted for under the equity method.

13. (a) Cost $300,000

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of net assets acquired</td>
<td></td>
</tr>
<tr>
<td>Book value of equity</td>
<td>220,000</td>
</tr>
<tr>
<td>Fair value in excess of book value, plant and equipment</td>
<td>60,000</td>
</tr>
<tr>
<td>Goodwill</td>
<td>$ 20,000</td>
</tr>
</tbody>
</table>

**Note:** Under the acquisition method, direct cost of professional services are not considered part of the fair value received and are expensed in the period incurred.

14. (a) $150,000. Goodwill:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of investment</td>
<td>$620,000</td>
</tr>
<tr>
<td>Fair value of net assets acquired</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$ 60,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>150,000</td>
</tr>
<tr>
<td>Property and equipment (net)</td>
<td>380,000</td>
</tr>
<tr>
<td>Goodwill*</td>
<td>0</td>
</tr>
<tr>
<td><strong>Less liabilities</strong></td>
<td>(120,000)</td>
</tr>
<tr>
<td><strong>Goodwill (excess cost over F.V. net assets acquired)</strong></td>
<td>$150,000</td>
</tr>
</tbody>
</table>

*Previously recorded goodwill is valued at -0- (not recorded) by an acquiring company. The acquiring company will determine any goodwill to be recorded based upon its acquisition cost and the fair value of identifiable assets and liabilities acquired.*
15. (b) An ordinary gain of $400,000 on a bargain purchase.

FV of net assets at 6/30 $1,400,000
Cost (100,000 shs. @ $10) 1,000,000
Gain on bargain purchase $ 400,000

According to SFAS 141, noncurrent assets except marketable securities must be reduced pro-rata by the excess of fair value over cost. If these assets are reduced to zero and a credit balance remains, this balance should be taken into income in the periods benefited.

16. (c) In SFAS 141R, the excess of the fair value of the net assets acquired over cost (negative goodwill) would be recognized as an ordinary gain on bargain purchase.

17. (b) Legally, the companies are separate, but due to the parent company's control, they are one entity in substance.

18. (d) Consolidated statements are based on the assumption that they represent the financial position and operating results of a single business (economic) enterprise.

19. (a) In a combination accounted for as a purchase, assets and liabilities acquired are recorded at fair market value.

20. (d) Generally, in a combination accounted for as a purchase, assets and liabilities acquired are recorded at their fair market value, on the date of acquisition (values assigned cannot exceed cost). As cost exceeds the fair value of the net assets acquired, assets and liabilities would be reported at their fair values, and the excess cost would be recognized as goodwill.

21. (a) Intercompany receivables are eliminated in consolidation; however, in separate (or unconsolidated) statements they are included and would be separately reported.

22. (d) Intercompany receivables (payables) are eliminated in consolidation.

23. (c) $500,000 consolidated cost of goods sold. In consolidation, intercompany sales of $250,000 would be eliminated from the sales and cost of goods sold of the consolidating entities. There would be no further adjustment for intercompany profits in ending inventory as all intercompany purchases were sold to unrelated entities.

<table>
<thead>
<tr>
<th>Cost of goods sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parker Corp.      $400,000</td>
</tr>
<tr>
<td>Smith, Inc.       350,000</td>
</tr>
<tr>
<td>Less intercompany sales (250,000)</td>
</tr>
<tr>
<td>Consolidated cost of goods sold $500,000</td>
</tr>
</tbody>
</table>

24. (c) Consolidated current assets before adjustment $320,000

Adjustment to eliminate intercompany profit in ending inventory
Intercompany inventory from Kent $60,000
Kent’s gross profit percentage $48,000 ÷ $240,000 × 20%
Intercompany profit in inventory 12,000
Consolidated current assets $308,000

Dean, Inc., is not included in consolidation (15% ownership by Clark); therefore, intercompany profit with Dean would not be eliminated nor affect consolidated current assets.
25. (d) $64,000.

Consolidated revenues $616,000
Separate company revenues:
  Pare $400,000
  Shel 280,000
Intercompany sales eliminated in consolidation $ 64,000

26. (b) $12,000.

Consolidated accounts receivable $ 78,000
Separate company receivables
  Pare $ 52,000
  Shel 38,000
Intercompany receivables eliminated in consolidation $ 12,000

27. (a) $6,000.

Consolidated inventory $104,000
Separate company inventory
  Pare $ 60,000
  Shel 50,000
Unrealized intercompany profit eliminated in consolidation $ 6,000

28. (a) $1,100,000 cost and $300,000 accumulated depreciation. For consolidation purposes the intercompany sale of an asset is treated as though it had never taken place. Consolidated statements are based on the assumption they represent the financial position and operating results of a single business enterprise and should not include gains or losses on intercompany transactions. An intercompany sale does not provide a new basis for stating cost or related depreciation for consolidation purposes. The depreciation for Year 2 should be the parent’s cost of $1,100,000 less the salvage value of $100,000 divided by 20 years for a total of $50,000. The Year 2 depreciation of $50,000 is added to the accumulated depreciation at January 1 of $250,000 for a December 31, Year 2 total of $300,000.

29. (b) For consolidation purposes, the intercompany sale of an asset is treated as though it had never taken place. An intercompany sale does not provide a new basis for stating cost or related depreciation for consolidation purposes. Therefore, gains or losses on intercompany transactions and their related effect on depreciation are eliminated.

   The equipment is being depreciated by the straight-line method, over a 3-year remaining life, with no allowance for residual value. Therefore, the depreciation applicable to the gain on the intercompany sale would be 1/3 (33-1/3%) of the gain and would be eliminated from depreciation expense and accumulated depreciation in consolidation.

30. (d) $6,000 intercompany profit in inventory.

Intercompany purchases in Scroll’s inventory:
  Pirn’s intercompany sales to Scroll $100,000
  Less: Cost of goods sold from intercompany purchases from Pirn 80,000
  Scroll’s ending inventory from intercompany purchases 20,000
Pirn’s gross profit percentage ($150,000/$500,000) \( \times \) 30% *
Intercompany profit in Scroll’s inventory $ 6,000

*Pirn’s sales to Scroll are made on the same terms as those made to third parties.
31. (b) $47,000 consolidated depreciation expense.

<table>
<thead>
<tr>
<th>Depreciation expense:</th>
<th>Pirm</th>
<th>$40,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scroll</td>
<td>10,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Less depreciation applicable to gain on intercompany sale of equipment</th>
<th>$12,000</th>
<th>4 yrs.</th>
<th>(3,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated depreciation expense</td>
<td>$47,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For consolidation purposes the intercompany sale of an asset is treated as though it had never taken place. Therefore, gains or losses on intercompany transactions are eliminated. An intercompany sale does not provide a new basis for stating cost or related depreciation for consolidation purposes.

32. (a) In consolidation, the acquisition of the bonds payable of one of the consolidating companies by another of the consolidating companies is treated (basically) as a retirement of debt. The investment in bonds is eliminated against the bonds payable and its related accounts and any difference is treated as a gain or loss.

The carrying value of the bonds is less than the amount paid to acquire the bonds as they were issued at a discount (below face value) and acquired at a premium (above face value). Therefore, there would be a loss on the elimination of intercompany bonds in consolidation, resulting in a decrease in consolidated retained earnings.

33. (a) In consolidation, the acquisition of the bonds payable of one of the consolidating companies by another of the consolidating companies is treated (basically) as a retirement of debt. The investment in bonds is eliminated against the bonds payable and its related accounts and any difference is treated as a gain or loss.

The carrying value of the bonds ($1,075,000) is greater than the amount paid to acquire the bonds ($975,000); therefore, there would be a gain on the elimination of intercompany bonds in consolidation, resulting in an increase in consolidated retained earnings. Since the bonds are the parent company bonds, the minority interest is not affected.

34. (a) $0. Parent company stock acquired by a subsidiary is usually treated as treasury stock, according "gains" and "losses" from such transactions are not recognized in income. Any intercompany dividends from such stock holdings are eliminated in consolidation.

35. (b) $25,000 Dividends. Under the purchase method, consolidated dividends are the parent's dividends. Dividends paid by the subsidiary are eliminated in consolidation as intercompany/investment or minority interest.

36. (b) $30,000 Minority interest.

<table>
<thead>
<tr>
<th>Subsidiary (Kidd) net assets 12/31/YR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common stock</td>
</tr>
<tr>
<td>Retained earnings</td>
</tr>
<tr>
<td>Net assets</td>
</tr>
<tr>
<td>% minority interest</td>
</tr>
<tr>
<td>Minority interest</td>
</tr>
</tbody>
</table>

37. (b) $100,000 Consolidated common stock. Under the purchase method, consolidated common stock is the common stock of the parent. Subsidiary common stock is eliminated in consolidation (to investment and/or minority interest).

38. (b) The parent’s investment in subsidiary account and its proportionate share of the subsidiary’s equity accounts, which include retained earnings, are eliminated in a consolidation. The remainder of the subsidiary’s equity is reported separately as the minority interest. Thus, consolidated retained earnings is essentially the parent’s retained earnings at year-end. The subsidiary’s cash dividend reduces its retained earnings balance and therefore the minority interest but not the parent’s retained earnings.
39. (b) Under the acquisition method, the parent/investor (Phillips, Inc.) recognizes in income its share of the subsidiary’s/investee’s (Sago, Inc.) net income or loss subsequent to the date of acquisition. Therefore, for the first six months of Year 4, 20% of Sago’s net income accrues to Phillips and for the last six months of Year 4, 95% (20% + 75%) accrues to Phillips.

40. (d) In an acquisition, acquired retained earnings are eliminated against the investment. Therefore, consolidated retained earnings at acquisition would be the retained earnings of the parent corporation, Pane Corp., of $3,250,000. ($3,200,000 + $800,000 – $750,000)

41. (a) Purchase: $100,000

| Poe's dividends ($25,000/QTR x 4) | 100,000 |
| Shaw's dividends: |
| First 3 QTRS ($10,000/QTR x 3) | NA |
| 4th QTR | Eliminated |
| Consolidated dividends | $100,000 |

Poe's (parent's) dividends of $100,000 would be included in consolidated financial statements and Shaw's (subsidiary's) 4th quarter dividend would be eliminated in consolidation as an intercompany transaction (there are no minority interests).

Shaw's first 3 quarterly dividends would be excluded under the Purchase method as pre-acquisition transactions.

42. (a) $455,000. Total current assets:

| Scott Company current assets at book value | $135,000 |
| Increase in fair value of Scott's inventory* | 10,000 |
| Scott Company current assets at fair value | $145,000 |
| Purl Company current assets at book value | 310,000 |
| Consolidated current assets | $455,000 |

*Inventory was still on hand at December 31.

43. (b) $1,450,000. Total assets:

| Scott Company assets at book value | $415,000 |
| Increase in fair value of Scott's inventory | 10,000 |
| Scott Company assets at fair value | $425,000 |
| Purl Company assets at book value | 1,325,000 |
| Less: Investment in Scott (equity method) | – 390,000 |
| Consolidated total assets | $1,360,000 |

Add: Goodwill | $100,000 |
The impairment loss from goodwill | – 10,000 |
Consolidated total assets | $1,450,000 |

*Refer to question #46.

Alternative calculation:

| Purl Company liabilities and stockholders equity (assets) at book value | $1,325,000 |
| Scott Company liabilities at fair value | 125,000 |
| Consolidated total assets | $1,450,000 |

44. (d) $755,000 total retained earnings. The consolidated retained earnings will be the same as the parent company's (Purl Company) retained earnings because the equity method used by the parent company adjusts for the parent's share of the subsidiary's net income and the amortization of goodwill.
45. (b) The consolidated net income will be the same as the parent company’s (Purl Company) net income because the equity method used by the parent adjusts for the parent’s share of the subsidiary’s net income and the amortization of goodwill.

Alternative calculation:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purl Company net income</td>
<td>$200,000</td>
</tr>
<tr>
<td>Less: Equity in earnings of Scott</td>
<td>$60,000</td>
</tr>
<tr>
<td>Add: Scott Company net income</td>
<td>$70,000</td>
</tr>
<tr>
<td>Less: impairment loss-goodwill</td>
<td>$10,000</td>
</tr>
<tr>
<td>Consolidated net income</td>
<td>$210,000</td>
</tr>
</tbody>
</table>

46. (b) $10,000. Impairment loss – goodwill:

Cost of investment, Jan. 1, Year 4: $360,000

Fair value of net assets acquired Jan. 1, Year 4:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book value assets</td>
<td>$410,000</td>
</tr>
<tr>
<td>Book value liabilities</td>
<td>$160,000</td>
</tr>
<tr>
<td>Book value net assets</td>
<td>$250,000</td>
</tr>
<tr>
<td>Increase in fair value of inventory</td>
<td>$10,000</td>
</tr>
<tr>
<td>Fair value of net asset</td>
<td>$260,000</td>
</tr>
</tbody>
</table>

Goodwill, Jan. 1, Year 4: $100,000

Life: $ x 10 %

Impairment loss – goodwill: $10,000

47. (d) Increase in Net Assets = Increase in Stockholders' Equity:

Stock issued in business combination: $1,000,000 (FV)

Note: Under the acquisition method, direct cost of professional services are not considered part of the fair value received and are expensed in the period incurred.

48. (c) $3,600,000 as the cost of the investment.

Stock issued at fair market value

100,000 shares × $36 per share = $3,600,000

Under the acquisition method, indirect and general expenses related to the acquisition should be charged to expense when incurred. Cost of registering and issuing equity securities are charged (debited) to A.P.I.C.

49. (d) Under the purchase method, direct costs of acquisition are included as part of the cost of the investment, while indirect and general expenses related to the acquisition should be charged to expense when incurred. Costs of registering and issuing equity securities are charged (debited) to additional paid-in capital.

50. (d) Combined financial statements (as distinguished from consolidated statements) may be used to present the financial position and the results of operations; where one individual owns a controlling interest in several corporations, which are related in their operations; for companies under common management; for a group of unconsolidated subsidiaries.

Answers (a) and (b) are incorrect, as consolidated financial statements should be prepared when controlling financial interest rests directly or indirectly in one of the companies included in the consolidation.

Answer (c) is incorrect as “some common individual owners” is not justification for either combined or consolidated financial statements.
51. (d) Combined financial statements (as distinguished from consolidated statements) may be used to present the financial position and results of operations; where one individual owns a controlling interest in several corporations, which are related in their operations; for companies under common management; for a group of unconsolidated subsidiaries.

52. (d) $0 receivables from affiliates. When combined statements are prepared for a group of related companies, intercompany transactions and profits or losses should be eliminated.

53. (c) Per ARB #51, where combined statements are prepared for a group of related companies, intercompany transactions and profit or losses should be eliminated, and if there are problems in connection with such matters as minority interest, foreign operations, different fiscal periods, or income taxes, they should be treated in the same manner as in consolidated statements. To the extent there is any intercompany investment, it is offset against the related equity. If there is no intercompany investment, the individual company equities are combined.

54. (b) $41,000 combined gross profit. Where combined statements are prepared for a group of related companies, intercompany transactions and profits or losses should be eliminated. Intercompany sales of $130,000 (Bee to Cee) would be eliminated from combined sales and cost of goods sold (purchases). As Cee sold only half ($65,000) of the intercompany purchases, half of the intercompany profits, $15,000 (1/2 x $30,000 Bee gross profit) would be eliminated from ending inventory and charged back against cost of goods sold.

<table>
<thead>
<tr>
<th>Sales Bee &amp; Cee ($130,000 + $91,000)</th>
<th>$221,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less intercompany sales</td>
<td>(130,000)</td>
</tr>
<tr>
<td>Combined sales</td>
<td>$ 91,000</td>
</tr>
<tr>
<td>Less combined cost of goods sold</td>
<td>$165,000</td>
</tr>
<tr>
<td>CGS Bee &amp; Cee ($100,000 + $65,000)</td>
<td></td>
</tr>
<tr>
<td>Less intercompany sales</td>
<td>(130,000)</td>
</tr>
<tr>
<td>Add: intercompany profit in ending inventory</td>
<td>$15,000</td>
</tr>
<tr>
<td>(1/2 x $30,000)</td>
<td>$ 50,000</td>
</tr>
<tr>
<td>Combined gross profit</td>
<td>$ 41,000</td>
</tr>
</tbody>
</table>

55. (a) The additional depreciation which will result from the excess of market over book value should be charged to investment income over the remaining useful life of the assets per APB #18.

56. (c) Under the equity method, the investor's share of the excess of fair market value over book value of depreciable assets is amortized over the assets' useful economic life as a charge against investment income (equity in earnings of investee) and a credit (reduction) to the investment carrying value.

57. (d) The entries should have been:

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in subsidiary (40% of $20,000)</td>
<td>8000</td>
</tr>
<tr>
<td>Equity in earnings of subsidiary</td>
<td>8000</td>
</tr>
<tr>
<td>Cash</td>
<td>2000</td>
</tr>
<tr>
<td>Investment in subsidiary (40% of $5,000)</td>
<td>2000</td>
</tr>
</tbody>
</table>

By erroneously recognizing the $2000 dividend as revenue, retained earnings are overstated. The dividends should have been booked as a reduction of the investment; thus the investment is overstated.

58. (c) Cost—$15 x 250,000 shares $3,750,000

<table>
<thead>
<tr>
<th>Fair value of net assets acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book value</td>
</tr>
<tr>
<td>Fair value in excess of book value, P.P.E.</td>
</tr>
<tr>
<td>Goodwill</td>
</tr>
</tbody>
</table>

4S-9
59. (d) If the appraised values of the identifiable assets required exceed the acquisition price, the excess appraised value is recorded as an ordinary gain on a bargain purchase.

60. (b) Purl Corp. net income (parent)

<table>
<thead>
<tr>
<th>Period</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six months ended 6/30/YR2</td>
<td>$ 750,000</td>
</tr>
<tr>
<td>Six months ended 12/31/YR2</td>
<td>$ 825,000</td>
</tr>
<tr>
<td>Parent corp. net income for year ended 12/31/YR2</td>
<td>$1,575,000</td>
</tr>
<tr>
<td>Add: Scott Corp. net income (subsidiary)</td>
<td>$375,000</td>
</tr>
<tr>
<td>Less: Intercompany profit in ending inventory</td>
<td>($45,000)</td>
</tr>
<tr>
<td>Consolidated net income for year ended 12/31/YR2</td>
<td>$1,905,000</td>
</tr>
</tbody>
</table>

Under the purchase method of accounting for business combinations, the results of operations are combined only after the date of acquisition, and are based upon the cost to the acquiring corporation. The effects of intercompany transactions are eliminated as consolidated statements are based on the assumption that they represent the financial position and operating results of a single business enterprise.

61. (d) Pard’s revenue $200,000
Spin’s revenue $140,000
Total individual revenues $340,000
Consolidated revenues $308,000
Intercompany sales eliminated in consolidation $32,000

62. (b) Pard’s accounts receivable $26,000
Spin’s accounts receivable $19,000
Total individual accounts receivable $45,000
Consolidated accounts receivable $39,000
Intercompany accounts receivable eliminated in consolidation $6,000

63. (c) Intercompany sales (refer to answer #61) $32,000
% in ending inventory × 37.5%
Intercompany inventory at sales price $12,000
Less intercompany profit
Total individual inventory ($30,000 + $25,000) $55,000
Consolidated inventory $52,000
Intercompany profit in inventory eliminated in consolidation $3,000
Consolidated intercompany inventory $9,000

64. (b) % minority interest = \[ \frac{\text{Minority interest}}{\text{Total subsidiary equity}} \]
= \[ \frac{10,000}{50,000} \]
= 20%

65. (c) $56,000 overstatement of revenue. When combined financial statements are prepared, intercompany transactions and profits or losses should be eliminated. Therefore, combined revenues are overstated by the amount of intercompany sales. $56,000 (140% × $40,000 cost).
66. (a) $56,000 elimination of cost of goods sold. When combined financial statements are prepared, intercompany transactions and profits or losses should be eliminated. The amount of intercompany sales of merchandise, $56,000 (140% × $40,000 cost) should be eliminated from combined sales and cost of goods sold.

67. (d) Since Band Co. receives additional shares at no cost from the stock dividend, the cost per share would decrease and the transaction would be recorded as a memo entry. This is true regardless of whether the cost or equity basis is used. Since the stock dividend does not include a transfer of assets, it is never considered revenue.

68. (b) The goodwill is the price paid minus 30% of the fair value of net assets:
\[ $200,000 - (30\% \times 600,000) = $20,000 \]

69. (b) Goodwill is the price paid less the fair value of net assets:  
\[ $860,000 - ($840,000 - $140,000) = $160,000. \]

70. (b) Under the acquisition method, direct cost of professional services are not considered part of the fair value received and are expensed in the period incurred. The registration fees for equity securities issued are part of the cost of issuing the securities and would be charged to additional paid-in capital. Neither of these costs would be expenses.

71. (b) Plack’s receipt of the stock dividend on April 30 increased its shares in Ty Corp. to 12,000 shares (10,000 + 2,000). The December 15th dividend of $2 per share x the 12,000 shares would result in dividend income of $24,000.

72. (b) Puff would report investment income of 40% x Straw’s income of $150,000 = $60,000. This amount would be reduced by the adjustment for the excess fair value of the equipment $100,000 x 40% / 5 years = $8,000) for a net of $52,000.

73. (b) The acquisition method is acceptable for both US GAAP and IFRS. The other alternatives are not acceptable.

74. (a) The proportionate-share method is approved by IFRS but not by US GAAP. The other alternatives are not acceptable.

75. (c) Since the Fair Value exceeds the book value, there is not any indication of an impairment less.

76. (b) Under IFRS, if the book value of the company ($9,400) exceeds the fair value ($9,000), the difference of $400 is recognized as an impairment loss.

77. (d) The original balance in goodwill was $1,000 and the impairment loss was $400. Therefore, the remaining balance would be $600.

78. (c) The goodwill impairment loss is part of the calculation of operating income.

79. (a) The proportionate-share method records the non-controlling interest at its share of the acquisition-date fair values excluding goodwill.

80. (d) Under the proportionate-share method, none of the value of goodwill is allocated to non-controlling interest. Therefore, the consolidated statements only report the parent's share of the goodwill.

81. (b) Under the acquisition method, the total amount of goodwill is reported on the consolidated balance sheet. The total goodwill would be the fair value of $1,000,000 less the fair value of the net identifiable net assets of $950,000 for a total goodwill of $50,000.

82. (c) Under the proportionate-share method, none of the goodwill is allocated to non-controlling interest. Therefore, ABC would report 90% x $50,000 or $45,000 on its consolidated balance sheet.
Chapter Four
Solutions to Consolidated Financial Statements
Problems

NUMBER 1

1. $14,000 (decrease in consolidated net income)
   Elimination of gain on sale of equipment:
   
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales price to Poe</td>
<td>$36,000</td>
</tr>
<tr>
<td>Shaw's carrying value</td>
<td>15,000</td>
</tr>
<tr>
<td>Intercompany gain eliminated</td>
<td>$21,000</td>
</tr>
<tr>
<td>Depreciation adjustment re. gain:</td>
<td></td>
</tr>
<tr>
<td>Straight line depreciation on gain</td>
<td></td>
</tr>
<tr>
<td>eliminated from cost of equipment</td>
<td></td>
</tr>
<tr>
<td>$21,000 / 3 yrs.</td>
<td>(7,000)</td>
</tr>
<tr>
<td>Net decrease in consolidated net income</td>
<td>$14,000</td>
</tr>
</tbody>
</table>

2. $10,000 (decrease in consolidated net income)
   Intercompany profit eliminated from ending inventory is $10,000 ($20,000 intercompany profit x 50% ending inventory from intercompany sales).

   The elimination of the intercompany sale of $60,000 (Debit - Sales; Credit - Cost of goods sold) has no effect on consolidated net income.

3. $9,000 (increase in consolidated net income)
   Carrying value of Shaw's bonds payable (50% x $200,000) $100,000
   Amount paid for intercompany bonds 91,000
   Gain on retirement of bonds 9,000

   The elimination of intercompany investment in bonds is treated as a retirement of debt.

4. (A) Consolidated cash would be the sum of the individual cash balances on the separate company's books. Consolidation eliminations do not affect cash.

5. (B) Consolidated equipment would be the sum of the individual equipment balances less the gain on the intercompany sale of equipment eliminated in consolidation (see #1 above).

6. (E) Intercompany investments are eliminated in consolidation.

7. (B) Consolidated bonds payable would be the sum of the individual bonds payable less the bonds payable eliminated as a result of the intercompany investment in bonds ($100,000) (refer #3 above).

8. (F) Minority interest represents the non-controlling interest in a subsidiary's net assets which are included in the consolidated financial statements. Minority interest is recorded/set up in consolidation when the subsidiary equity is eliminated against the investment in subsidiary and minority interest. It would not appear in the separate statements or trial balance of either company.

9. (C) Consolidated common stock is the parents' common stock (Poe). The subsidiary equity accounts are eliminated in consolidation.

10. (C) Consolidated beginning retained earnings are the retained earnings of the parent (Poe). The subsidiary retained earnings are eliminated in consolidation.
11. (C) Only the parent company's (Poe) dividends are reported as consolidated dividend distributions. The subsidiary's dividends paid to the parent are eliminated in consolidation and subsidiary distributions to minority interest are charged against the balance of minority interest.

12. (F) "Gain on retirement of bonds" results from the consolidation elimination of the intercompany investment in bonds. No such amount would be reported on the separate financial statements of either company (refer #3 above).

13. (B) Consolidated cost of goods sold would be the sum of the individual C.G.S. less the elimination of the intercompany sales plus the elimination of the intercompany profit in ending inventory (refer #2 above).

14. (D) Interest expense would be the same as the amount shown on Shaw's trial balance. Poe's purchase of Shaw's bonds (intercompany investment) was made on December 31. Therefore, no interest expense would have been eliminated in consolidation as intercompany interest.

15. (B) Consolidated depreciation expense would be the sum of the individual depreciation expenses less the elimination of depreciation attributable to the gain from the intercompany sale of equipment (refer #1 above).

**NUMBER 2**

1. (A) Consolidated cash would be the sum of the individual cash balances on the combining company's separate financial statements. Consolidation eliminations do not affect cash.

2. (B) Consolidated equipment would be the sum of the individual equipment balances on the combining company's separate financial statements less the gain from the intercompany sale of equipment at a price greater than its carrying value. Intercompany gains and loss are eliminated in consolidation.

3. (E) Intercompany investments are eliminated in consolidation.

4. (F) Minority interest represents the non-controlling interest in a subsidiary's net assets which are included in the consolidated financial statements. It is set up/recorded in consolidation when the subsidiary equity is eliminated against the investment in subsidiary and minority interest. It would not appear in the separate statements or trial balances of either company.

5. (C) Consolidated common stock is the parents' common stock (Purl). The subsidiary's equity accounts are eliminated in consolidation (against the investment in subsidiary and minority interest).

6. (C) Consolidated beginning retained earnings are the parents' retained earnings (Purl). The subsidiary's equity accounts are eliminated in consolidation.

7. (C) Only the parents' dividends are reported as consolidated dividends. The subsidiary's dividends paid to the parent are eliminated in consolidation and subsidiary distributions to minority interest are charged against the balance of minority interest.

8. (B) Consolidated cost of goods sold would be the sum of the individual cost of goods sold on the separate financial statements less the elimination of the intercompany sales plus the elimination of the intercompany profit in ending inventory from the intercompany sales.

9. (A) Consolidated interest expense would be the sum of the individual amounts on the separate financial statements. There is no indication of any intercompany interest bearing debt, which would require elimination of the debt and its related interest amounts.

10. (B) Consolidated depreciation expense would be the sum of the individual depreciation expense balances on the separate financial statements less the elimination of depreciation applicable to the amount of the gain from the intercompany sale of equipment.
NUMBER 3

a.
To: Johnson
From: Smith, CPA
Re: Acme Co. Investments in Kern Co. and Wand Co.

The purpose of this memorandum is to explain to you that although Acme's investment in Wand and Kern represent equal ownership interests of 20%, the use of different accounting methods may be appropriate under generally accepted accounting principles.

Under those principles, Acme must use the equity method to account for an investment if Acme's ownership interest allows it to exercise significant influence over the investee company.

Generally, an investor is presumed to be able to exercise significant influence when it has an ownership interest of 20% or more, and is presumed to be unable to exercise significant influence when it has an ownership interest of less than 20%. However, either presumption may be overcome by predominant evidence to the contrary. The determination of whether an investor can exercise significant influence is not always clear and often requires judgment in light of such factors as an investor's representation on the investee's board of directors, participation in policymaking activities, and/or the extent of ownership as compared to that investee's other shareholders.

Acme used the entity method to account for its investment in Kern which indicates that its 20% ownership interest allowed it to exercise significant influence over Kern's operating and financial policies.

Acme accounted for its investment in Wand as available-for-sale securities. Apparently, despite its 20% ownership interest, there was evidence that Acme could not exercise significant influence over Wand's operating and financial policies; hence, Acme did not use the equity method to account for its investment in Ward.

b.  

<table>
<thead>
<tr>
<th>Kern</th>
<th>Wand</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance sheet</strong> – Acme reported its investment in Kern at a carrying amount of $660,000.</td>
<td><strong>Balance sheet</strong> – Acme reported its investment in Wand at a fair value of $400,000.</td>
</tr>
<tr>
<td>Calculations:</td>
<td>Calculation:</td>
</tr>
<tr>
<td>Equity in earnings = $80,000 (400,000 x 20%)</td>
<td>20,000 shares x $20 per share</td>
</tr>
<tr>
<td>Dividend rec'd = $20,000 ($100,000 x 20%)</td>
<td></td>
</tr>
<tr>
<td>Carrying amount = $600,000 + $80,000 - $20,000</td>
<td></td>
</tr>
</tbody>
</table>

**Statement of Income and Comprehensive Income**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acme's equity in Kern's earnings $80,000</td>
<td>Dividend income $12,000</td>
</tr>
<tr>
<td>Calculation:</td>
<td>Calculation:</td>
</tr>
<tr>
<td>$400,000 x 20%</td>
<td>$60,000 x 20%</td>
</tr>
<tr>
<td></td>
<td>Unrealized gain $100,000</td>
</tr>
<tr>
<td></td>
<td>Calculation:</td>
</tr>
<tr>
<td></td>
<td>$400,000 -- $300,000</td>
</tr>
</tbody>
</table>
Chapter 4 Simulation Exercises

Part A:
Cain Corp. acquired all of the outstanding $10 par value voting common stock of Frey, Inc., on January 1, Year 5, in exchange for 25,000 shares of its $10 par value voting common stock. On December 31, Year 4, Cain's common stock had a closing market price of $30 per share on a national stock exchange. The acquisition was appropriately accounted for as a purchase. Both companies continued to operate as separate business entities maintaining separate accounting records with years ending December 31.

On December 31, Year 5, the companies had condensed financial statements as follows:

<table>
<thead>
<tr>
<th>Cain Corp.</th>
<th>Frey, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income Statement</strong></td>
<td><strong>Dr. (Cr.)</strong></td>
</tr>
<tr>
<td>Net sales</td>
<td>$(3,800,000)</td>
</tr>
<tr>
<td>Dividends from Rey</td>
<td>(40,000)</td>
</tr>
<tr>
<td>Gain on sale of warehouse</td>
<td>(30,000)</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>2,360,000</td>
</tr>
<tr>
<td>Operating expenses (including depreciation)</td>
<td>1,100,000</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td><strong>$ (410,000)</strong></td>
</tr>
</tbody>
</table>

| **Retained Earnings Statement** | **Dr. (Cr.)** | **Dr. (Cr.)** |
| Balance, 1/1/YR5 | $ (440,000) | $(156,000) |
| Net income | (410,000) | (190,000) |
| Dividends paid | | 40,000 |
| **Balance, 12/31/YR5** | **$ (850,000)** | **$ (306,000)** |

| **Balance Sheet** | **Dr. (Cr.)** | **Dr. (Cr.)** |
| Assets: | | |
| Cash | $570,000 | $150,000 |
| Accounts receivable (net) | 860,000 | 350,000 |
| Inventories | 1,060,000 | 410,000 |
| Land, plant and equipment | 1,320,000 | 680,000 |
| Accumulated depreciation | (370,000) | (210,000) |
| Investment in Frey (at cost) | 750,000 | | |
| **Total assets** | **$4,190,000** | **$1,380,000** |

| Liabilities and Stockholders' Equity: | **Dr. (Cr.)** | **Dr. (Cr.)** |
| Accounts payable and accrued expenses | $(1,340,000) | $(594,000) |
| Common stock ($10 par) | (1,700,000) | (400,000) |
| Additional paid-in capital | (300,000) | (80,000) |
| Retained earnings | (850,000) | (306,000) |
| **Total liabilities and stockholders' equity** | **$(4,190,000)** | **$(1,380,000)** |

Additional information follows:

- There were no changes in the common stock and additional paid-in capital accounts during Year 5 except the one necessitated by Cain's acquisition of Frey.
- At the acquisition date, the fair value of Frey's machinery exceeded its book value by $54,000. The excess cost will be amortized over the estimated average remaining life of six years. The fair values of all of Frey's other assets and liabilities were equal to their book values. An impairment test at the end of the year indicated that goodwill had lost $3,000 of its value.
- On July 1, Year 5, Cain sold a warehouse facility to Frey for $129,000 cash. At the date of sale, Cain's book values were $33,000 for the land and $66,000 for the undepreciated cost of the building. Based on a real estate
appraisal, Frey allocated $43,000 of the purchase price to land and $86,000 to building. Frey is depreciating the building over its estimated five-year remaining useful life by the straight-line method with no salvage value.

- During Year 5, Cain purchased merchandise from Frey at an aggregate invoice price of $180,000, which included a 100% markup on Frey's cost. At December 31, Year 5, Cain owed Frey $86,000 on these purchases, and $36,000 of this merchandise remained in Cain's inventory.

**Required:**

Complete the following worksheet that would be used to prepare a consolidated income statement and a consolidated retained earnings statement for the year ended December 31, Year 5, and a consolidated balance sheet as of December 31, Year 5. Formal consolidated statements and adjusting entries are **not** required. Ignore income tax considerations. Supporting computations should be in good form.

### Cain Corp. and Subsidiary

**CONSOLIDATING STATEMENT WORKSHEET**

**December 31, Year 5**

<table>
<thead>
<tr>
<th>Income Statement</th>
<th>Cain Corp. Dr. (Cr.)</th>
<th>Frey, Inc. Dr. (Cr.)</th>
<th>Adjustments &amp; Eliminations Dr.</th>
<th>Cr.</th>
<th>Adjusted Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>(3,800,000)</td>
<td>(1,500,000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends from Frey</td>
<td>(40,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain on sale of warehouse</td>
<td>(30,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>2,360,000</td>
<td>870,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses (including depreciation)</td>
<td>1,100,000</td>
<td>440,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>(410,000)</td>
<td>(190,000)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Retained Earnings Statement**

| Retained Earnings Statement | | | | |
|----------------------------|----------------------|----------------------|------------------|
| Balance, 1/1/YR5          | (440,000)            | (156,000)            |                  |
| Net income                | (410,000)            | (190,000)            |                  |
| Dividends paid            |                      |                      | 40,000           |
| Balance, 12/31/YR5        | (850,000)            | (306,000)            |                  |

**Balance Sheet**

<table>
<thead>
<tr>
<th>Assets:</th>
<th>Cain Corp.</th>
<th>Frey, Inc.</th>
<th>Adjustments &amp; Eliminations</th>
<th>Adjusted Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>570,000</td>
<td>150,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable (net)</td>
<td>860,000</td>
<td>350,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventories</td>
<td>1,060,000</td>
<td>410,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land, plant and equipment</td>
<td>1,320,000</td>
<td>680,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(370,000)</td>
<td>(210,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment in Frey (at cost)</td>
<td>750,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Assets</td>
<td>4,190,000</td>
<td>1,380,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities &amp; Stockholders’ Equity:</th>
<th>Cain Corp.</th>
<th>Frey, Inc.</th>
<th>Adjustments &amp; Eliminations</th>
<th>Adjusted Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable &amp; accrued expenses</td>
<td>(1,340,000)</td>
<td>(594,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock ($10 par)</td>
<td>(1,700,000)</td>
<td>(400,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>(300,000)</td>
<td>(80,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retained earnings</td>
<td>(850,000)</td>
<td>(306,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Liabilities &amp; Stockholders’ Equity</td>
<td>(4,190,000)</td>
<td>(1,380,000)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part B:

Since Grumer Co.'s inception, Monroe Co. has owned 18% of Grumer's outstanding common stock. Monroe provides three key management personnel to Grumer and purchased 25% of Grumer's output during 1999. Grumer is profitable. On January 2, 2000, Monroe purchased additional common stock to finance Grumer's expansion, thereby becoming a 30% owner. Grumer's common stock does not have a quoted market price. The stock has always been issued at its book value, which is assumed to approximate its fair value.

Required:

a. In general, distinguish between investor income reporting under the cost method and under the equity method. Which method is more consistent with accrual accounting? Why?

b. Prior to January 2, 2000, what specific factors should Monroe have considered in determining the appropriate method of accounting for its investment in Grumer?
### Chapter 4 Simulation Solutions

#### Part A:

Cain Corp. and Subsidiary  
CONSOLIDATING STATEMENT WORKSHEET  
December 31, Year 5

<table>
<thead>
<tr>
<th>Income Statement</th>
<th>Cain Corp. Dr. (Cr.)</th>
<th>Frey, Inc. Dr. (Cr.)</th>
<th>Adjustments &amp; Eliminations Dr.</th>
<th>Adjusted Balance Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>(3,800,000)</td>
<td>(1,500,000)</td>
<td>[6] 180,000</td>
<td>(5,120,000)</td>
</tr>
<tr>
<td>Dividends from Frey</td>
<td>(40,000)</td>
<td></td>
<td>[3] 40,000</td>
<td></td>
</tr>
<tr>
<td>Gain on sale of warehouse</td>
<td>(30,000)</td>
<td></td>
<td>[4] 30,000</td>
<td></td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>2,360,000</td>
<td>870,000</td>
<td>[6] 162,000</td>
<td>3,068,000</td>
</tr>
<tr>
<td>Operating expenses (including depreciation)</td>
<td>1,100,000</td>
<td>440,000</td>
<td>[2] 9,000</td>
<td>[5] 2,000</td>
</tr>
<tr>
<td>Impairment loss - Goodwill</td>
<td></td>
<td></td>
<td>[2] 3,000</td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>(410,000)</td>
<td>(190,000)</td>
<td>[a] 262,000</td>
<td>[a] 164,000</td>
</tr>
</tbody>
</table>

#### Retained Earnings Statement

| Balance, 1/1/YR 5          | (440,000)           | (156,000)            | [1] 156,000                     |                      |
| Net income                 | (410,000)           | (190,000)            | [a] 262,000                     | [a] 164,000          | (502,000) |
| Dividends paid             |                     |                     | [3] 40,000                      |                      |

| Balance, 12/31/YR 5        | (850,000)           | (306,000)            | [b] 418,000                     | [b] 204,000          | (942,000) |

#### Balance Sheet

<table>
<thead>
<tr>
<th>Assets:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>570,000</td>
<td>150,000</td>
<td></td>
<td>720,000</td>
</tr>
<tr>
<td>Accounts receivable (net)</td>
<td>860,000</td>
<td>350,000</td>
<td>[7] 86,000</td>
<td>1,124,000</td>
</tr>
<tr>
<td>Inventories</td>
<td>1,060,000</td>
<td>410,000</td>
<td>[6] 18,000</td>
<td>1,452,000</td>
</tr>
<tr>
<td>Land, plant and equipment</td>
<td>1,320,000</td>
<td>680,000</td>
<td>[1] 54,000</td>
<td>[4] 30,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(370,000)</td>
<td>(210,000)</td>
<td>[5] 2,000</td>
<td>[2] 9,000</td>
</tr>
<tr>
<td>Investment in Frey (at cost)</td>
<td>750,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goodwill</td>
<td></td>
<td></td>
<td>[1] 60,000</td>
<td>[2] 3,000</td>
</tr>
<tr>
<td>Total Assets</td>
<td>4,190,000</td>
<td>1,380,000</td>
<td></td>
<td>4,790,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities &amp; Stockholders' Equity:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable &amp; accrued expenses</td>
<td>(1,340,000)</td>
<td>(594,000)</td>
<td>[7] 86,000</td>
<td>(1,848,000)</td>
</tr>
<tr>
<td>Common stock ($10 par)</td>
<td>(1,700,000)</td>
<td>(400,000)</td>
<td>[1] 400,000</td>
<td>(1,700,000)</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>(300,000)</td>
<td>(80,000)</td>
<td>[1] 80,000</td>
<td>(300,000)</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>(850,000)</td>
<td>(306,000)</td>
<td>[b] 418,000</td>
<td>[b] 204,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Liabilities &amp; Stockholders' Equity</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(4,190,000)</td>
<td>(1,380,000)</td>
<td>1,100,000</td>
<td>1,100,000</td>
<td>(4,790,000)</td>
</tr>
</tbody>
</table>
**Part A: (cont.)**

*Explanations of Adjustments and Eliminations*

[1] To eliminate the reciprocal elements in investment, goodwill, equity and property accounts. Cain's investment is carried at cost at December 31, Year 5.

[2] To record amortization of the fair value in excess of book value of Frey's machinery at date of acquisition ($54,000 % 6) and impairment loss – Goodwill $3,000 for the year ended December 31, Year 5.


[5] To eliminate the excess depreciation on the warehouse building sold by Cain to Frey

\[
\frac{1}{2} \times $4,000 \quad ($86,000 - $66,000 \times \frac{1}{5})
\]

[6] To eliminate intercompany sales from Cain to Frey and the intercompany profit in Cain's ending inventory as follows:

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>On hand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$180,000</td>
<td>$36,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>90,000</td>
<td>18,000</td>
</tr>
</tbody>
</table>

[7] To eliminate Cain's intercompany balance to Frey for the merchandise it purchased.

**Part B:**

a. Under the cost method, the investor recognizes dividends as income when received. Under the equity method, an investor recognizes as income its share of an investee's earnings or losses in the periods in which they are reported by the investee. The amount recognized as income is adjusted for any change in the difference between investment cost and underlying equity in net assets at the investment date. The equity method is more consistent with accrual accounting than is the cost method, because the equity method recognizes income when earned rather than when dividends are received.

b. Monroe should have assessed whether it could have exerted significant influence over Grumer's operating and financial policies. Monroe did not own 20% or more of Grumer's voting stock (which would have given the refutable presumption that it could exercise significant influence); however, the ability to exercise significant influence may be indicated by other factors such as Monroe's provision of three key management personnel and purchase of 25% of Grumer's output.
Chapter Five
Earnings Per Share, Segment Reporting: Accounting Standards Codification

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IN GENERAL

In 1997 the FASB issued ASC 260 on computing earnings per share. Its purpose is to simplify the calculation of EPS and make it more comparable with international accounting standards.

The objective of ASC 260 is to measure the performance of an entity over the reporting period. The statement requires the reporting of a Basic EPS for companies with a simple capital structure and a Basic EPS plus a Diluted EPS for companies with a complex capital structure.

BASIC EARNINGS PER SHARE

ASC 260 requires all public companies to disclose Basic EPS if they have a simple capital structure with no potential common shares from convertible securities, stock options, warrants, or contingent shares.

Basic EPS must be reported on the face of the income statement for income from continuing operations and net income. The Basic EPS amounts for discontinuing operations, extraordinary items and the cumulative effect of the changes in accounting principles must be disclosed in the face of the income statement or in the notes to the financial statements.

Computation of Basic Earnings Per Share

Basic = Net Income Available to Common Shareholders
EPS Weighted Average Number of Common Shares Outstanding

Net Income Available to Common Shareholders

Income available to common shareholders is net income less preferred dividends for declared non cumulative preferred stock. For cumulative preferred stock the current year preferred dividend is deducted whether it is declared or not. If the company has preferred stock whose dividend is cumulative only if earned, it must deduct the dividend earned in calculating Basic EPS.

Basic = Net Income - Preferred Dividends
EPS Weighted Average Number of Common Shares Outstanding

Weighted Average Number of Common Shares Outstanding

Takes into account the number of shares outstanding during the period, weighted to reflect the portion of the period outstanding.

Example: T Corporation has 100,000 common shares outstanding on January 1 of the current year and issued 6,000 shares on March 1.

Weighted average shares outstanding for the quarter ended March 31:
100,000 + 1/3 (6,000) = 102,000 (3/1 to 3/31 = 1/3 of period 1/1 to 3/31)

For the 6 months ended June 30:
100,000 + 4/6 (6,000) = 104,000 (3/1 to 6/30 = 4/6 of period 1/1 to 6/30)
For the year ended December 31:
$$100,000 + 10/12 (6,000) = 105,000 \quad (3/1 to 12/31 = 10/12 of period 1/1 to 6/30)$$

If T Corporation had reacquired 6,000 shares on March 1 of the current year, the weighted average shares outstanding for the same periods would be:

Quarter ended March 31 — $94,000 + 2/3 (6,000) = 98,000 \quad (1/1 to 3/1 = 2/3 of period)

6 months ended June 30 — $94,000 + 2/6 (6,000) = 96,000 \quad (1/1 to 3/1 = 2/6 of period)

Year ended December 31 — $94,000 + 2/12 (6,000) = 95,000 \quad (1/1 to 3/1 = 2/12 of period)

* Stock dividends and stock splits require retroactive adjustment to current equivalent shares as of the beginning of the period(s) being presented for the determination of weighted average shares outstanding. If such changes occur after the close of the period, but before the financial statements are completed, the computation of earnings per share should be based on the new number of shares because the reader's primary interest is presumed to be related to the current capitalization.

Example: The X Corporation completed the following common stock transactions during the period January 1, Year 2, through July 1, Year 6:

<table>
<thead>
<tr>
<th>Date</th>
<th>Transaction</th>
<th>No. of Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/YR2</td>
<td>Issued (original issue)</td>
<td>1,000</td>
</tr>
<tr>
<td>1/1/YR3</td>
<td>Stock dividend to preferred stockholders</td>
<td>50</td>
</tr>
<tr>
<td>5/1/YR4</td>
<td>Shares exchanged for stock of another corporation</td>
<td>600</td>
</tr>
<tr>
<td>4/1/YR5</td>
<td>3 for 2 stock split</td>
<td></td>
</tr>
<tr>
<td>2/1/YR6</td>
<td>100% stock dividend to common stockholders</td>
<td></td>
</tr>
<tr>
<td>7/1/YR6</td>
<td>Shares issued to preferred stockholders in exchange for preferred on a 2 for 1 basis</td>
<td>442</td>
</tr>
</tbody>
</table>

Compute the number of shares outstanding, weighted average shares outstanding, and current equivalent shares outstanding for each year.

Solution:

- Shares outstanding:

<table>
<thead>
<tr>
<th>Date</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding beginning of year —0—</td>
<td>1,000</td>
<td>1,050</td>
<td>1,650</td>
<td>2,475</td>
<td></td>
</tr>
<tr>
<td>1/1/YR2 issued</td>
<td>1,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/1/YR3 dividend to P/S</td>
<td></td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/1/YR4 exchanged</td>
<td></td>
<td>600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/1/YR5 3:2 split (1/2)</td>
<td></td>
<td></td>
<td>825</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/1/YR6 dividend to C/S</td>
<td></td>
<td></td>
<td>2,475</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/1/YR6 exchanged</td>
<td></td>
<td></td>
<td>442</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|——|--------|--------|--------|--------|--------|
| | 1,000  | 1,050  | 1,650  | 2,475  | 5,392  |
• Weighted average shares outstanding:

<table>
<thead>
<tr>
<th>Year</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding beginning of year (100%)</td>
<td>—0—</td>
<td>1,000</td>
<td>1,050</td>
<td>1,650</td>
</tr>
<tr>
<td>YR2</td>
<td>1,000</td>
<td>from 1/1 = 100%</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>YR3</td>
<td>50</td>
<td>from 1/1 = 100%</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>YR4</td>
<td>600</td>
<td>from 5/1 = 8/12</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td>YR5</td>
<td>825</td>
<td>split retroactive to 1/1</td>
<td>825</td>
<td></td>
</tr>
<tr>
<td>YR6</td>
<td>2,475</td>
<td>dividend retroactive to 1/1</td>
<td>2,475</td>
<td></td>
</tr>
<tr>
<td></td>
<td>442</td>
<td>from 7/1 = 6/12</td>
<td>221</td>
<td></td>
</tr>
<tr>
<td>Weighted Average outstanding</td>
<td>1,000</td>
<td>1,050</td>
<td>1,450</td>
<td>2,475</td>
</tr>
</tbody>
</table>

• Current equivalent shares outstanding:

<table>
<thead>
<tr>
<th>Year</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted average shares outstanding</td>
<td>1,000</td>
<td>1,050</td>
<td>1,450</td>
<td>2,475</td>
</tr>
<tr>
<td>Adjustment for 3:2 split in Year 5 (1/2)</td>
<td>500</td>
<td>525</td>
<td>725</td>
<td>—</td>
</tr>
<tr>
<td>Current equivalent shares for Year 5</td>
<td>1,500</td>
<td>1,575</td>
<td>2,175</td>
<td>2,475</td>
</tr>
<tr>
<td>Adjustment for 100% stock dividend in Year 6</td>
<td>1,500</td>
<td>1,575</td>
<td>2,175</td>
<td>2,475</td>
</tr>
<tr>
<td>Current equivalent shares for Year 6</td>
<td>3,000</td>
<td>3,150</td>
<td>4,350</td>
<td>4,950</td>
</tr>
</tbody>
</table>

**DILUTED EARNINGS PER SHARE**

**IN GENERAL**

Diluted EPS is required for companies with a complex capital structure. A complex structure is one that includes potential common shares as convertible securities, stock options, stock warrants, and contingent shares. The purpose of Diluted EPS is to measure the performance of an entity over the reporting period while taking into account the effect of all dilutive potential common shares that were outstanding during the period. All antidilutive potential common shares, securities that if converted or exercised would individually increase EPS, are disregarded.

**LOSS FROM CONTINUING OPERATIONS**

For a company with a loss from continuing operations, the exercise of options or conversions of securities would normally increase the number of potential common shares outstanding and reduce the loss per share. Since this would be antidilutive, ASC 260 states that if there is a loss from continuing operations, Diluted EPS would be the same as Basic EPS.

**EXAMPLE OF DILUTIVE EPS WITH CONVERTIBLE PREFERRED STOCK – IF CONVERTED METHOD**

In Year 4 the Stevens Corp. had 90,000 shares of common stock and 10,000 shares of preferred stock outstanding for the full year. During Year 4, Stevens paid preferred dividends of $2.50 per share and the preferred stock is convertible into 20,000 shares of common stock. The net income for the year is $485,000 and the tax rate is 30%.

The capital structure is complex because of the presence of the convertible preferred stock. The first step is to calculate the Basic EPS and then compare it to the Dilutive EPS to determine if the convertible stock is dilutive.

\[
\text{Basic EPS} = \frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Weighted Average Number of Common Shares Outstanding}}
\]

\[
= \frac{\$485,000 - (2.50 \text{ per share} \times 10,000 \text{ shares})}{90,000 \text{ common shares}}
\]

\[
= \$5.11 \text{ per share}
\]
To determine the dilutive effect, assume the convertible preferred stock was converted (if converted method) into 20,000 shares of common stock at January 1, Year 4 and the $2.50 per share preferred dividend was not distributed. Therefore, the Diluted EPS would be calculated as follows:

\[
\text{Dilutive EPS} = \frac{\text{Net Income}}{\text{Weighted Average Number Of Common Shares Outstanding} + \text{Dilutive Potential Common Shares}}
\]

\[
= \frac{\$485,000}{90,000 \text{ shares} + 20,000 \text{ shares}}
\]

\[
= \$4.41 \text{ per share}
\]

The convertible preferred stock is dilutive because it reduced the EPS from $5.11 to $4.41. Stevens Corp. would disclose on the face of the income statement a Basic EPS of $5.11 and a Diluted EPS of $4.41.

NOTE: The if converted method assumes the conversion of the preferred stock at the earliest possible date. Since in our example the preferred stock was outstanding for the full year, the earliest date was January 1, Year 4. However, if the preferred stock was issued on April 1, Year 4, the earliest date for conversion would be April 1, Year 4. The if converted method would then assume that the preferred stock was converted into 20,000 on April 1 and weight the shares as having been outstanding for 9 months (20,000 shares x 9/12 = 15,000 shares). The Diluted EPS would use the 15,000 shares as the potential common shares in the denominator of the formula.

**EXAMPLE OF DILUTED EPS WITH CONVERTIBLE BONDS – IF CONVERTED METHOD**

In 1999 Johnson Company had 100,000 shares of common stock and $1,000,000 of 9% convertible bonds outstanding for the full year. The bonds are convertible into 30,000 shares of common stock, the tax rate is 30% and the net income for the year is $485,000.

Basic EPS = \[
\frac{\text{Net Income}}{\text{Weighted Average Number of Common Shares Outstanding}}
\]

\[
= \frac{\$485,000}{100,000 \text{ common shares}}
\]

\[
= \$4.85 \text{ per share}
\]

The Diluted EPS assumes that the bonds were converted into 30,000 shares of common stock on January 1, Year 4 and that Johnson Co. did not have bond interest of $90,000 (9% x $1,000,000 of bonds) for the year. Since the bond interest has already been deducted from the $485,000 in net income, the diluted EPS calculation would add back the $90,000 of bond interest and increase the income before tax by $90,000. The tax effect of the increase at 30% would be $27,000 and the net effect of the increase after taxes would be $63,000 ($90,000 - $27,000).

Dilutive EPS = \[
\frac{\text{Net Income} + \text{Interest Expense (Net of Tax)}}{\text{Weighted Average Number Of Common Shares Outstanding} + \text{Dilutive Potential Common Shares}}
\]

\[
= \frac{\$485,000 + ($90,000 - $27,000)}{100,000 \text{ shares} + 30,000 \text{ shares}}
\]

\[
= \$4.22 \text{ per share}
\]

Since the Diluted EPS of $4.22 is lower that the Basic EPS of $4.85, the convertible bonds are dilutive.
TREASURY STOCK METHOD

Earnings per share is computed as if the funds obtained from the exercising of options and warrants at the beginning of the period (or at time of issuance, if later) were used to purchase common stock (treasury stock), at the average market price during the period. The excess of shares assumed issued, from the exercise of options and warrants, over the shares assumed purchased as treasury stock is considered dilutive and included in the denominator of the Diluted EPS as potential common shares. If the shares assumed purchased exceeds the shares assumed issued, the options and warrants are antidilutive and the options and warrants are excluded from the earnings per share computation. This antidilutive situation occurs when the exercise price exceeds the average market price of the options or warrants.

Example: A corporation has 10,000 warrants outstanding, exercisable at $54 with the average market price per common share during the reporting period being $60. The potential common shares included in the Diluted earnings per share computation is determined as follows:

Number of shares issued from exercise of warrants 10,000
Less: Number of shares purchased with proceeds
10,000 × $540,000 ÷ $60 9,000
Potential Common Shares 1,000

The $540,000 realized from exercise of the warrants and issuance of 10,000 shares would be sufficient to acquire 9,000 shares of treasury stock. Therefore, 1,000 shares would be added to the weighted average common shares outstanding in computing Diluted earnings per share for the period.

The potential common shares also be determined with the following formula:

Potential Common Shares = \( \frac{\text{Market price} - \text{Option price}}{\text{Market price}} \times \text{Option Shares} \)

For the example:

\( \frac{\$60 - \$54}{60} \times 10,000 = 1,000 \) C.S.E. shares

ADDITIONAL POINTS

In situations in which an entity has different conversion rates for convertible securities or different stock option or warrant prices over a period of time, the Diluted EPS is based on the most advantageous conversion rate or exercise price from the point of view of the security holder. The most advantageous option price is the lowest one and the most advantageous conversion rate is the one that results in the most shares.

CONTINGENT SHARES

In a business combination the purchaser may promise to issue additional shares in the future if a contingency is met. If the contingency is passage of time, the contingent shares should be considered potential common shares and included in the denominator for the calculation of Diluted EPS. If the contingency is the attainment of a certain income or market price level and this level is met at the end of the year, the contingent shares are considered potential common shares and included in the calculation of the Diluted EPS.

DISCLOSURE REQUIREMENTS

For each period for which a company presents an income statement, it must disclose:

- A reconciliation of the numerators and denominators of basic and diluted EPS from continuing operations, including the individual income and per share effects of all securities used in the computations.
- The effect of preferred dividends in arriving at income available to common stockholders in basic EPS.
- The securities not included in the Diluted EPS computation (because they were antidilutive in the current period) that could potentially dilute Basic EPS in the future.
A description of any transaction that occurs after the end of the period but before the financial statements are issued that would materially change the number of common shares or potential shares.

Examples of these transactions include the issuance or acquisition of common shares, the issuance of warrants, options, convertible securities and the conversion or exercise of potential common shares outstanding at the end of the period into common shares.

*Note:* See Appendix B for a Summary of EPS Formulas.

**ASC 280 -- DISCLOSURES ABOUT SEGMENTS OF AN ENTERPRISE AND RELATED INFORMATION**

**OVERVIEW**

ASC 280 determines the reporting standards for segment reporting, the disclosure of information about different components of an enterprise operation as well as information related to the enterprise’s products and services, its geographic areas and its major customers.

**OBJECTIVES**

The objectives of ASC 280 are to help users of financial statements:

- Better understand enterprise performance.
- Better assess its prospects for future net cash flows.
- Make more informed judgments about the enterprise as a whole.

**IDENTIFYING REPORTABLE OPERATING SEGMENTS (SEE APPENDIX A)**

**A. MANAGEMENT APPROACH**

ASC 280 adopts a management approach to identifying segments in which segments are based on the way that management organizes segments internally for making operating decisions and assessing performance.

Segments can be organized by product or services by geography, by legal entity, or by the type of customer. These are referred to as operating segments.

Operating segments are components of an enterprise which meet three criteria:

1. Engage in business activities and earn revenues and incur expenses.
2. Operating results are regularly reviewed by the chief operating decision-maker to assess performance and make resource allocation decisions.
3. Discrete financial information is available from the internal reporting system.

**B. AGGREGATION OF OPERATING SEGMENTS IF APPROPRIATE**

After identifying the segments based on internal reporting, management must decide which of the segments should be reported separately. If two or more of the segments have essentially the same business activities in essentially the same economic environment, information for these individual segments may be combined (aggregated). For example, a retail chain may have 20 stores that individually meet the definition of an operating segment but each store is essentially the same. In this case management may desire to combine the 20 stores into one operating segment.

To aggregate similar operating segments the following criteria must be considered:

1. The nature of the products and services provided by each operating segment.
2. The nature of the production process.
3. The type of class of customer.
4. The distribution methods.
5. If applicable, the nature of the regulatory environment.

Segments must be similar in each and every one of these areas to be combined. However, aggregation of similar segments is not required.

C. 10 PERCENT QUANTITATIVE THRESHOLD TESTS
Once operating segments have been identified, three quantitative threshold tests are then applied to identify segments of sufficient size to warrant separate disclosure. Any segment meeting even one of these tests is separately reportable.

1. Revenue test – segment revenues, both external and intersegment, are 10 percent or more of the combined revenue, external and intersegment, of all reported operating segments.
2. Profit or loss test – segment profit or loss is 10 percent or more of the greater (in absolute terms) of the combined reported profit of all profitable segments or the combined reported loss of all segments incurring a loss.
3. Asset test – segment assets are 10 percent or more of the combined assets of all operating segments.

D. MANAGEMENT’S JUDGMENT
Operating segments that were reported in previous periods that do not meet the 10 percent test in the current period may continue to be reported if judged to be of continuing significance to management.

E. SUFFICIENCY TEST
If the total external revenue of the operating segments is less than 75% of consolidated revenue, additional operating segments are identified as reportable until the 75% level is reached.

F. ALL OTHERS
All other segments that are not reportable should be combined with other business activities such as corporate headquarters and disclosed in an all other category.

INFORMATION TO BE DISCLOSED BY OPERATING SEGMENT
A. GENERAL INFORMATION about the operating segment including factors used to identify operating segments and the types of products and services from which each segment derives its revenues.

B. SEGMENT PROFIT OR LOSS AND THE FOLLOWING COMPONENTS OF PROFIT OR LOSS
1. Revenues from external customers.
2. Revenues from transactions with other operating segments.
3. Interest revenue.
4. Interest expense.
5. Depreciation, depletion, and amortization expense.
6. Other significant noncash items included in segment profit or loss.
7. Unusual items (discontinued operations and extraordinary items).
8. Income tax expense or benefit.
9. Equity in net income of investee accounted for on the equity method.

C. TOTAL SEGMENT ASSETS AND THE FOLLOWING RELATED ITEMS
1. Investment in equity method affiliates.
2. Expenditures for additions to long-lived assets.
D. ADDITIONAL DISCLOSURES
2. Differences in measurement practices between a segment and the complete entity.
3. Reconciliations – the enterprise will need to reconcile the segment amounts disclosed to the corresponding enterprise amounts.

E. INTERIM PERIOD DISCLOSURES
Four items of information must also be disclosed by operating segment in interim financial statements:
1. Revenues from external customers.
2. Intersegment revenues.
3. Segment profit or loss.
4. Total assets for which there has been a material change from the amount disclosed in the last annual report.

ENTERPRISE-WIDE DISCLOSURES
A. INFORMATION ABOUT PRODUCTS AND SERVICES
1. Additional information must be provided if operating segments have not been determined based on differences in products and services, or if the enterprise has only one operating segment.
2. In those situations, revenues derived from transactions with external customers must be disclosed by product or service.

B. INFORMATION ABOUT GEOGRAPHIC AREAS
1. Revenues from external customers and long-lived assets must be reported for:
   • the domestic country.
   • all foreign countries in which the enterprise has assets or derives revenues.
   • each individual foreign country in which the enterprise has material revenues or material long-lived assets.
2. The FASB does not provide any specific guidance with regard to determining materiality of revenues or long-lived assets; this is left to management’s judgment.

C. INFORMATION ABOUT MAJOR CUSTOMERS
If revenues from a single customer are 10 percent or more of consolidated revenues, the following disclosures should be made:
1. Amount of revenue to each customer that has 10 percent or more of consolidated revenues.
2. Amount of revenue to domestic government agencies or foreign governments if 10 percent or more of consolidated revenues.
3. Identify the industry segment making the sale.
4. Disclosures of the customer's name is not required.

Case Example: Assume that an enterprise has seven industry segments some of which incurred operating losses, as follows:

<table>
<thead>
<tr>
<th>Industry Segment</th>
<th>Operating Profit or (Operating Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$100</td>
</tr>
<tr>
<td>B</td>
<td>500</td>
</tr>
<tr>
<td>C</td>
<td>400</td>
</tr>
<tr>
<td>D</td>
<td>(295)</td>
</tr>
<tr>
<td>E</td>
<td>(600)</td>
</tr>
<tr>
<td>F</td>
<td>(100)</td>
</tr>
<tr>
<td>G</td>
<td>(105)</td>
</tr>
</tbody>
</table>

$100

5-8
The combined operating profit of all industry segments that did not incur a loss (A, B, and C) is $1,000. The absolute amount of the combined operating loss of those segments that did incur a loss (D, E, F, and G) is $1,100. Therefore, Industry Segments B, C, D, and E are significant because the absolute amount of their individual operating profit or operating loss equals or exceeds $110 (10 percent of $1,100). Additional industry segments might also be significant under the revenue and identifiable asset tests.

ILLUSTRATIVE PROBLEM FOR SEGMENT REPORTING

X Corporation operates in various diversified industries within the U.S. as well as in several foreign locations. The company has designated certain operating units as segments in an attempt to comply with the tests in ASC 280.

Listed below are the designated reporting units along with the revenues, operating profit and assets of each (000's).

| — U.S. — | — Foreign — |
|———|———|———|———|———|———|———|———|———|———|———|
|Toys | Appliances | Furniture | Toys | Bottles | Total | Eliminations | Consolidated |
|———|———|———|———|———|———|———|———|———|———|———|
|Gross revenues | $1,000 | $18,000 | $4,000 | $600 | $400 | $24,000 | $500 | $23,500 |
|Operating profit (loss) | 100 | 2,000 | (800) | (50) | 10 | 1,260 | (20) | 1,240 |
|Assets | 800 | 6,000 | 1,000 | 300 | 100 | 8,200 | — | 8,200 |

The company combines its foreign and U.S. toy operations as one segment for testing purposes.

Application of tests:
1. Revenues — 10% × gross revenues = $24,000 × .10 = $2,400
   Therefore, appliances and furniture are reportable segments.

2. Operating profit (loss)/profits = 10% × $2,060\(^1\) = $206
   or losses = 10% × 800 = $80

Use 206. Therefore, appliances and furniture are reportable segments.

\[\text{U.S. toys} \quad \text{Foreign toys}\]

\[
\begin{array}{c|c|c}
\text{Toys net} & $100 & \text{Foreign toys} \\
\text{Appliances} & \text{(50)} & \\
\text{Bottles} & 2,000 & \\
\hline
\end{array}
\]

$2,060 Operating profits for test purposes

3. Assets — 10% × $8,200 = $820. Therefore, appliances, furniture and toys are reportable segments.

4. Segments sufficiency test (75% test): .75 × $23,500 (revenues to unaffiliated customers) = $17,625—required.
   Revenues included in reportable segments exceed the requirement. Therefore, the three segments determined to be reportable are sufficient.
Identify operating segments by utilizing management approach.

Do some segments meet all aggregation criteria? Yes → Aggregate segments, if desired.

No

Do segments meet the 10% tests for revenue, profit, or assets? Yes → Aggregate segments, if desired.

No

Do some segments meet a majority of the aggregation criteria? Yes → Aggregate segments, if desired.

No

Is revenue of reportable segments at least 75% of consolidated revenue (75% test)? Yes → These are reportable segments to be disclosed.

No → Identify additional segments until 75% test is met.

Identify additional segments until 75% test is met.

Combine remaining segments/activities into "all other" category.

These are reportable segments to be disclosed.

*Adopted from ASC 280.
APPENDIX B
SUMMARY OF EPS FORMULAS

Basic EPS = \[
\frac{\text{Net Income} - \text{Current years preferred dividends}^*}{\text{Weighted average common shares}}
\]

Diluted EPS with Convertible preferred stock = \[
\frac{\text{Net Income}}{\text{Weighted average Common Shares} + \text{Weighted average Potential Shares}}
\]

Diluted EPS with Convertible Bonds = \[
\frac{\text{Net Income} + (\text{Bond Interest} - \text{Tax Effect})}{\text{Weighted average Common Shares} + \text{Weighted average Potential Shares}}
\]

Diluted EPS with Stock Options or Warrants = \[
\frac{\text{Net Income}}{\text{Weighted average Common Shares} + \text{Weighted average Potential Shares (Treasury stock method)}}
\]

* Current cumulative preferred dividends are always deducted. Non-cumulative current dividends are deducted if declared.
IFRS - EARNINGS PER SHARE SEGMENT REPORTING

Earnings Per Share
Both IFRS and US GAAP require the reporting of basic earnings per share and diluted EPS. Both agree that separate disclosures of EPS from continuing operations and EPS from net income must be reported. The calculations are basically the same. The difference is in the reporting of the EPS effect of discontinued operations and extraordinary items. US GAAP requires the effect of each be reported as a part of EPS disclosure but IFRS does not require the EPS effect to be shown.

FAST TRACK SUMMARY

<table>
<thead>
<tr>
<th>EPS</th>
<th>IFRS</th>
<th>USGAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic EPS</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Diluted EPS</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>EPS Continuing Operation</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>EPS Discontinued Operation</td>
<td>Not Required</td>
<td>Required</td>
</tr>
<tr>
<td>EPS Extraordinary items</td>
<td>Not Required</td>
<td>Required</td>
</tr>
<tr>
<td>EPS Net Income</td>
<td>Required</td>
<td>Required</td>
</tr>
</tbody>
</table>

Segment Reporting
Segment reporting is the same for IFRS and US GAAP. They both use a management approach, the three criteria that must be met to qualify as a reportable segment and 75% sufficiency rule. The criteria are 10% Revenue Rule, 10% Profit and Loss Rule, and the 10% Asset Rule.

FAST TRACK SUMMARY

<table>
<thead>
<tr>
<th>SEGMENT REPORTING</th>
<th>IFRS</th>
<th>US GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Approach</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Meet one of the three criteria tests</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>75% of consolidated revenue sufficiency test</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Chapter Five
Earnings Per Share, Segment Reporting Questions

EARNINGS PER SHARE

BASIC EARNINGS PER SHARE

1. Rand, Inc., had 20,000 shares of common stock outstanding at January 1, Year 2. On May 1, Year 2, it issued 10,500 shares of common stock. Outstanding all year were 10,000 shares of nonconvertible preferred stock on which a dividend of $4 per share was paid in December Year 2. Net income for Year 2 was $96,700. Rand's basic earnings per share for Year 2 are:
   a. $1.86
   b. $2.10
   c. $2.84
   d. $3.58

2. At December 31, Year 3 and Year 2, Gow Corp. had 100,000 shares of common stock and 10,000 shares of 5%, $100 par value cumulative preferred stock outstanding. No dividends were declared on either the preferred or common stock in Year 3 or Year 2. Net income for Year 3 was $1,000,000. For Year 3, basic earnings per common share amounted to:
   a. $10.00
   b. $9.50
   c. $9.00
   d. $5.00

3. Fay Corporation's capital structure at December 31, Year 3, was as follows:

<table>
<thead>
<tr>
<th>Shares issued and outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common stock</td>
</tr>
<tr>
<td>Nonconvertible preferred stock</td>
</tr>
</tbody>
</table>

   On October 1, Year 4, Fay issued a 10% stock dividend on its common stock, and paid $100,000 cash dividends on the preferred stock. Net income for the year ended December 31, Year 4, was $960,000. Fay's Year 4 basic earnings per common share should be:
   a. $3.91
   b. $4.10
   c. $4.36
   d. $4.68

4. The following information pertains to Jet Corp.'s outstanding stock for Year 3:

   | Common stock, $5 par value |
   | Shares outstanding, 1/1/YR3 | 20,000 |
   | 2-for-1 stock split, 4/1/YR3 | 20,000 |
   | Shares issued, 7/1/YR3 | 10,000 |

   Preferred stock, $10 par value, 5% cumulative
   Shares outstanding, 1/1/YR3 | 4,000 |

   What are the number of shares Jet should use to calculate Year 3 basic earnings per share?
   a. 40,000
   b. 45,000
   c. 50,000
   d. 54,000

5. On January 31, Year 3, Pack, Inc., split its common stock 2 for 1, and Young, Inc., issued a 5% stock dividend. Both companies issued their December 31, Year 2, financial statements on March 1, Year 3. Should Pack’s Year 2 basic earnings per share (EPS) take into consideration the stock split, and should Young’s Year 2 EPS take into consideration the stock dividend?

<table>
<thead>
<tr>
<th>Pack’s Year 2 EPS</th>
<th>Young’s Year 2 EPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>No</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

DILUTED EPS – CONVERTIBLE PREFERRED STOCK

6. During Year 4, Moore Corp. had the following two classes of stock issued and outstanding for the entire year:

   - 100,000 shares of common stock, $1 par.
   - 1,000 shares of 4% preferred stock, $100 par, convertible share for share into common stock.

   Moore's Year 4 net income was $900,000, and its income tax rate for the year was 30%. In the computation of diluted earnings per share for Year 4, the amount to be used in the numerator is:
   a. $896,000
   b. $898,800
   c. $900,000
   d. $901,200
7. Dunn, Inc., had 200,000 shares of $20 par common stock and 20,000 shares of $100 par, 6%, cumulative, convertible preferred stock outstanding for the entire year ended December 31, Year 2. Each share is convertible into five shares of common stock. Dunn’s net income for Year 2 was $840,000. For the year ended December 31, Year 2, the diluted earnings per share is
   a. $2.40  
   b. $2.80  
   c. $3.60  
   d. $4.20

**DILUTED EPS—CONVERTIBLE BONDS**

8. On January 2, Year 4, Lang Co. issued at par $10,000 of 4% bonds convertible in total into 1,000 shares of Lang’s common stock. No bonds were converted during Year 4.

Throughout Year 4, Lang had 1,000 shares of common stock outstanding. Lang’s Year 4 net income was $1,000. Lang’s income tax rate is 50%.

No potentially dilutive securities other than the convertible bonds were outstanding during Year 4.

Lang’s diluted earnings per share for Year 4 would be
   a. $1.00.  
   b. $.50.  
   c. $.70.  
   d. $.60.

9. On June 30, Year 2, Lomond, Inc., issued twenty, $10,000, 7% bonds at par. Each bond was convertible into 200 shares of common stock. On January 1, Year 3, 10,000 shares of common stock were outstanding. The bondholders converted all the bonds on July 1, Year 3. On the bonds’ issuance date, the average Aa corporate bond yield was 12%. During Year 3, the average Aa corporate bond yield was 9%. The following amounts were reported in Lomond’s income statement for the year ended December 31, Year 3:
   
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$977,000</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>920,000</td>
</tr>
<tr>
<td>Interest on bonds</td>
<td>7,000</td>
</tr>
<tr>
<td>Income before income tax</td>
<td>50,000</td>
</tr>
<tr>
<td>Income tax at 30%</td>
<td>15,000</td>
</tr>
<tr>
<td>Net income</td>
<td>$ 35,000</td>
</tr>
</tbody>
</table>

**TREASURY STOCK METHOD FOR OPTIONS AND WARRANTS**

11. On January 1, Year 2, Hage Corporation granted options to purchase 9,000 of its common shares at $7 each. The market price of common was $10.50 per share on March 31, Year 2, and averaged $9 per share during the quarter then ended. There was no change in the 50,000 shares of outstanding common stock during the quarter ended March 31, Year 2. Net income for the quarter was $8,268. The number of shares to be used in computing diluted earnings per share for the quarter is
   a. 59,000.  
   b. 50,000.  
   c. 53,000.  
   d. 52,000.
12. The Year 4 net income of Mack Co. was $100,000, and 100,000 shares of its common stock were outstanding during the entire year. In addition, there were outstanding options to purchase 10,000 shares of common stock at $10 per share. These options were granted in Year 2 and none had been exercised by December 31, Year 4. Market prices of Mack's common stock during Year 4 were:

<table>
<thead>
<tr>
<th>Date</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1</td>
<td>$20 per share</td>
</tr>
<tr>
<td>December 31</td>
<td>$40 per share</td>
</tr>
<tr>
<td>Average</td>
<td>$25 per share</td>
</tr>
</tbody>
</table>

The amount which should be shown as Mack's diluted earnings per share for Year 4 is (rounded to the nearest cent)

a. $100,000 = $.91. 110,000 shares
b. $100,000 = $.95. 105,000 shares
c. $100,000 = $.94. 106,000 shares
d. $100,000 = $.93. 107,500 shares

13. Dilutive stock options would generally be used in the calculation of Basic earnings per share and Diluted earnings per share. An antidilutive common stock option is

<table>
<thead>
<tr>
<th>Potential common share included in computing diluted earnings per share</th>
</tr>
</thead>
</table>
a. No                        | No                      |
b. No                        | Yes                     |
c. Yes                       | No                      |
d. Yes                       | Yes                     |

14. In a diluted earnings per share computation, the treasury stock method is used for options and warrants to reflect assumed reacquisition of common stock at the average market price during the period. If the exercise price of the options or warrants exceeds the average market price, the computation would

a. Fairly present diluted earnings per share on a prospective basis.
b. Fairly present the maximum potential dilution of diluted earnings per share on a prospective basis.
c. Reflect the excess of the number of shares assumed issued over the number of shares assumed reacquired as the potential dilution of earnings per share.
d. Be anti-dilutive.

15. An antidilutive common stock option is

<table>
<thead>
<tr>
<th>Potential common share included in computing diluted earnings per share</th>
</tr>
</thead>
</table>
a. No                        | No                      |
b. No                        | Yes                     |
c. Yes                       | No                      |
d. Yes                       | Yes                     |

**CONTINGENT EPS**

16. Throughout Year 2, J Co. had 10,000 shares of common stock outstanding. There was no potential dilution of earnings per share except as follows:

In Year 1, J Co. agreed to issue 2,000 additional shares of its stock to the former stockholders of an acquired company if the acquired company's earnings for any of the five years Year 2 through Year 6 exceeded $5,000.

Results of operations for Year 2 were:

- Net income of J Co. $10,000
- Net income of acquired company $4,000
- Consolidated net income $14,000

Diluted earnings per share for Year 2 on a consolidated basis would be

a. $14,000 = $1.40. 10,000
b. $14,000 = $1.17. 12,000
c. $15,000 = $1.50. 10,000
d. $15,000 = $1.25. 12,000

**EPS REVIEW**

17. Ian Co. is calculating earnings per share amounts for inclusion in the Ian’s annual report to shareholders. Ian has obtained the following information from the controller’s office as well as shareholder services:

- Net income from January 1 to December 31 $125,000
- Number of outstanding shares:
  - January 1 to March 31 15,000
  - April 1 to May 31 12,500
  - June 1 to December 31 17,000
In addition, Ian has issued 10,000 incentive stock options with an exercise price of $30 to its employees and a year-end market price of 425 per share. What amount is Ian’s diluted earnings per share for the year ended December 31?

a. $4.63
b. $4.85
c. $7.35
d. $7.94

18. Information relating to the capital structure of the Galaxy Company is as follows:

<table>
<thead>
<tr>
<th>December 31</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding shares of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock</td>
<td>90,000</td>
<td>90,000</td>
</tr>
<tr>
<td>Convertible preferred stock</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>9% convertible bonds</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
</tr>
</tbody>
</table>

During Year 4 Galaxy paid dividends of $2.50 per share on its preferred stock. The preferred stock is convertible into 20,000 shares of common stock. The 9% convertible bonds are convertible into 30,000 shares of common stock. The net income for the year ended December 31, Year 4, is $485,000. Assume that the income tax rate is 50%.

What should be the diluted earnings per share, rounded to the nearest penny, for the year ended December 31, Year 4?

a. $3.79.
b. $3.96.
c. $4.11.
d. $4.51.

19. Peters Corp.’s capital structure was as follows:

<table>
<thead>
<tr>
<th>December 31</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding shares of stock:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common</td>
<td>110,000</td>
<td>110,000</td>
</tr>
<tr>
<td>Convertible preferred</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>8% convertible bonds</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
</tr>
</tbody>
</table>

During Year 4, Peters paid dividends of $3.00 per share on its preferred stock. The preferred shares are convertible into 20,000 shares of common stock. The 8% bonds are convertible into 30,000 shares of common stock. Net income for Year 4 was $850,000. Assume that the income tax rate is 30%. The diluted earnings per share for Year 4 is

a. $6.31
b. $5.66
c. $7.08
d. $7.45

20. At December 31, Year 4, Lex, Inc. had 600,000 shares of common stock outstanding. On April 1, Year 5, an additional 180,000 shares of common stock were issued for cash. Lex also had $5,000,000 of 8% convertible bonds outstanding at December 31, Year 5, which are convertible into 150,000 shares of common stock. No bonds were issued or converted into common stock during Year 5. What is the number of shares that should be used in computing diluted earnings per share for Year 5?

a. 735,000
b. 780,000
c. 885,000
d. 930,000

21. On December 1, Year 2, Clay Co. declared and issued a 6% stock dividend on its 100,000 shares of outstanding common stock. There was no other common stock activity during Year 2. What number of shares should Clay use in determining basic earnings per share for Year 2?

a. 100,000.
b. 100,500.
c. 103,000.
d. 106,000.

22. Mann, Inc., had 300,000 shares of common stock issued and outstanding at December 31, Year 5. On July 1, Year 6, an additional 50,000 shares of common stock were issued for cash. Mann also had unexercised stock options to purchase 40,000 shares of common stock at $15 per share outstanding at the beginning and end of Year 6. The average market price of Mann’s common stock was $20 during Year 6. What is the number of shares that should be used in computing diluted earnings per share for the year ended December 31, Year 6?

a. 325,000.
b. 335,000.
c. 360,000.
d. 365,000.

SEGMENT REPORTING

10% TEST FOR ASSETS

23. In financial reporting for segments of a business enterprise, which of the following should be taken into account in computing the amount of an industry segment's identifiable assets?
10% REVENUE TEST

24. The following information pertains to revenue earned by Timm Co.'s industry segments for the year ended December 31, Year 2:

<table>
<thead>
<tr>
<th>Segment</th>
<th>Sales to unaffiliated customers</th>
<th>Intersegment sales</th>
<th>Total revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alo</td>
<td>5,000</td>
<td>3,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Bix</td>
<td>8,000</td>
<td>4,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Cee</td>
<td>4,000</td>
<td>--</td>
<td>4,000</td>
</tr>
<tr>
<td>Dil</td>
<td>43,000</td>
<td>16,000</td>
<td>59,000</td>
</tr>
<tr>
<td>Combined</td>
<td>60,000</td>
<td>23,000</td>
<td>83,000</td>
</tr>
<tr>
<td>Elimination</td>
<td>—</td>
<td>(23,000)</td>
<td>(23,000)</td>
</tr>
<tr>
<td>Consolidated</td>
<td>$60,000</td>
<td>—</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

In conformity with the revenue test, Timm's reportable segments were:

- Only Dil.
- Only Bix and Dil.
- Only Alo, Bix, and Dil.
- Alo, Bix, Cee, and Dil.

25. The following information pertains to Aria Corp. and its divisions for the year ended December 31, Year 2:

Sales to unaffiliated customers $2,000,000
Intersegment sales of products similar to those sold to unaffiliated customers 600,000
Interest earned on loans to other industry segments 40,000

Aria and all of its divisions are engaged solely in manufacturing operations. Aria has a reportable segment if that segment's revenue exceeds:

- $264,000
- $260,000
- $204,000
- $200,000

26. Correy Corp. and its divisions are engaged solely in manufacturing operations. The following data (consistent with prior years' data) pertain to the industries in which operations were conducted for the year ended December 31, Year 5:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total revenue</th>
<th>Operating profit</th>
<th>12/31/YR5</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$10,000,000</td>
<td>$1,750,000</td>
<td>$20,000,000</td>
</tr>
<tr>
<td>B</td>
<td>8,000,000</td>
<td>1,400,000</td>
<td>17,500,000</td>
</tr>
<tr>
<td>C</td>
<td>6,000,000</td>
<td>1,200,000</td>
<td>12,500,000</td>
</tr>
<tr>
<td>D</td>
<td>3,000,000</td>
<td>550,000</td>
<td>7,500,000</td>
</tr>
<tr>
<td>E</td>
<td>4,250,000</td>
<td>675,000</td>
<td>7,000,000</td>
</tr>
<tr>
<td>F</td>
<td>1,500,000</td>
<td>225,000</td>
<td>3,000,000</td>
</tr>
</tbody>
</table>

In its segment information for Year 5, how many reportable segments does Correy have?

- Three
- Four
- Five
- Six

27. Cott Co.'s four business segments have revenues and identifiable assets expressed as percentages of Cott's total revenues and total assets as follows:

<table>
<thead>
<tr>
<th></th>
<th>Revenues</th>
<th>Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ebon</td>
<td>64%</td>
<td>66%</td>
</tr>
<tr>
<td>Fair</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>Gel</td>
<td>14%</td>
<td>4%</td>
</tr>
<tr>
<td>Hak</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Which of these business segments are deemed to be reportable segments?

- Ebon only
- Ebon and Fair only
- Ebon, Fair, and Gel only
- Ebon, Fair, Gel, and Hak

28. Grum Corp., a publicly-owned corporation, is subject to the requirements for segment reporting. In its income statement for the year ended December 31, Year 2, Grum reported consolidated revenues of $50,000,000, operating expenses of $47,000,000, and net income of $3,000,000. Operating expenses include payroll costs of $15,000,000. Grum's combined identifiable assets of all industry segments at December 31, Year 2, were $40,000,000.
In its Year 2 financial statements, Grum should disclose major customer data if sales to any single customer amount to at least
a. $300,000
b. $1,500,000
c. $4,000,000
d. $5,000,000

Recently Disclosed Questions

29. In computing the weighted-average number of shares outstanding during the year, which of the following midyear events must be treated as if it had occurred at the beginning of the year?
a. Declaration and distribution of a stock dividend.
b. Purchase of treasury stock.
c. Sale of additional common stock.
d. Sale of preferred convertible stock.

30. Deck Co. had 120,000 shares of common stock outstanding at January 1, Year 2. On July 1, Year 2, it issued 40,000 additional shares of common stock. Outstanding all year were 10,000 shares of nonconvertible cumulative preferred stock. What is the number of shares that Deck should use to calculate Year 2 earnings per share?
a. 140,000
b. 150,000
c. 160,000
d. 170,000

31. Bean Co. included interest expense and transactions classified as extraordinary items in its determination of segment profit, which Bean’s chief financial officer considered in determining the segment’s operating budget. Bean is required to report the segment’s financial data under ASC 280, Disclosures about Segments of an Enterprise and Related Information. Which of the following items should Bean disclose in reporting segment data?

<table>
<thead>
<tr>
<th>Interest expense</th>
<th>Extraordinary items</th>
</tr>
</thead>
</table>
a. No              | No                  |
b. No              | Yes                 |
c. Yes             | No                  |
d. Yes             | Yes                 |

32. Which of the following should be disclosed for each reportable operating segment of an enterprise?

<table>
<thead>
<tr>
<th>Profit or loss</th>
<th>Total assets</th>
</tr>
</thead>
</table>
a. Yes           | Yes          |
b. Yes           | No           |
c. No            | Yes          |
d. No            | No           |

33. Which of the following factors determines whether an identified segment of an enterprise should be reported in the enterprise’s financial statements under ASC 280, Disclosures about Segments of an Enterprise and Related Information?
I. The segment’s assets constitute more than 10% of the combined assets of all operating segments.
II. The segment’s liabilities constitute more than 10% of the combined liabilities of all operating segments.

a. I only.
b. II only.
c. Both I and II.
d. Neither I nor II.

34. The following information is relevant to the computation of Chan Co.’s earning per share to be disclosed on Chan’s income statement for the year ending December 31:

Net income for Year 2 is $600,000.

$5,000,000 face value 10-year convertible bonds outstanding on January 1. The bonds were issued four years ago at a discount which is being amortized in the amount of $20,000 per year. The stated rate of interest on the bonds is 9%, and the bonds were issued to yield 10%. Each $1,000 bond is convertible into 20 shares of Chan's common stock.

Chan's corporate income tax rate is 25%.

Chan has no preferred stock outstanding, and no other convertible securities. What amount should be used as the numerator in the fraction used to compute Chan's diluted earnings per share assuming that the bonds are dilutive securities?

a. $130,000
b. $247,500
c. $952,500
d. $1,070,000
IFRS - EPS

35. The EPS effect of continuing operations must be reported by
a. IFRS only
b. US GAAP only
c. Both IFRS and US GAAP
d. Neither

36. The EPS effect of extraordinary items and discontinued operations must be reported by
a. IFRS only
b. US GAAP only
c. Both IFRS and US GAAP
d. Neither

37. Basic EPS and diluted EPS must be reported by
a. IFRS only
b. US GAAP
c. Both IFRS and US GAAP
d. Neither

IFRS - SEGMENT REPORTING

38. Under IFRS which tests must be applied to determine a reportable segment
a. Revenue and Asset test
b. Revenue, Cash Flow and Asset Test
c. Revenue, Expense, Cash Flow Test
d. Revenue, Profit and Loss, and Asset Test

39. Under IFRS, the initial approach used to identify a reportable segment is a
a. Consensus approach
b. Majority vote
c. Management approach
d. Committee approach
Chapter Five
Solutions to Earnings Per Share, Segment Reporting Questions

1. (b) Common shares outstanding 1/1/YR2  20,000
Weighted average number of shares
issued in Year 2 (8/12 × 10,500)  7,000
Denominator of EPS calculation  27,000
Net income  $96,700
Preferred dividends ($4 × 10,000)  – 40,000
Numerator of calculation  $56,700
EPS = $56,700 ÷ 27,000 = $2.10

2. (b)  $1,000,000 – $50,000 = $950,000
100,000 = $9.50 EPS

Even though no dividends were declared, the preferred dividends are subtracted from the numerator since the preferred shares are cumulative.

3. (a)  $960,000 – 100,000 = $860,000—numerator
200,000 + 20,000 = 220,000—denominator
EPS = $3.91

4. (b) The key point is that the stock split is retroactive to the beginning of the year.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Shares Outstanding</th>
<th>Fraction of Year</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1 balance</td>
<td>20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock split</td>
<td>× 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan. 1-June 30</td>
<td>40,000 × 6/12 = 20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares issued 7/1</td>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 1- Dec. 31</td>
<td>50,000 × 6/12 = 25,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Weighted average number of shares outstanding 45,000

5. (c) “If changes in common stock resulting from stock dividends or stock splits or reverse splits have been consummated after the close of the period but before the completion of the financial report, the per share computations shall be based on the new number of shares because the readers’ primary interest is presumed to be related to the current capitalization. If per share computations reflect those changes in the number of shares after the close of the period, the fact shall be disclosed.”

6. (c) The if converted method assumes that the preferred stock was converted to common stock and that preferred dividends were not distributed. Therefore, the numerator in the computation of Diluted EPS would be the net income of $900,000.

7. (b) Diluted EPS is the lesser of $840,000 ÷ 300,000 = $2.80 (assumes conversion) or $840,000 – $120,000 = $720,000 ÷ 200,000 = $3.60 (basic earnings per share); therefore, assuming conversion is dilutive.

8. (d) Diluted EPS = $1,000 NI + $200 after-tax interest
1,000 shs. common + 1,000 Potential common shares

= $1,200
2,000

= $.60
9. (b) The bonds are potential common shares for the first six months and outstanding shares for the second six months. The interest rates are no longer relevant to the calculation of EPS.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>$35,000</td>
</tr>
<tr>
<td>Interest adjustment</td>
<td>$4,900</td>
</tr>
<tr>
<td>Numerator for calculation of Diluted EPS</td>
<td>$39,900</td>
</tr>
<tr>
<td>Denominator =</td>
<td></td>
</tr>
<tr>
<td>Weighted average</td>
<td>12,000</td>
</tr>
<tr>
<td>Potential common shares</td>
<td>2,000</td>
</tr>
</tbody>
</table>

\[
\text{Diluted EPS} = \frac{\text{Numerator for calculation of Diluted EPS}}{\text{Denominator}} = \frac{39,900}{14,000} = 2.85
\]

10. (b) \[
\frac{850,000 + (80,000 - 24,000)}{110,000 + 20,000 + 30,000} = \frac{906,000}{160,000} = 5.66
\]

11. (d) Proceeds from exercise of options = 9,000 shs. × $7 = $63,000

Used to repurchase common stock at average market price = $63,000 ÷ $9 = 7,000 shs.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of shares if options exercised</td>
<td>9,000</td>
</tr>
<tr>
<td>Less: Shares assumed repurchased</td>
<td>7,000</td>
</tr>
<tr>
<td>Dilution (Potential Common Shares)</td>
<td>2,000</td>
</tr>
<tr>
<td>Shares for Diluted EPS</td>
<td>52,000</td>
</tr>
</tbody>
</table>

12. (c)

\[
\text{Treasury stock method: } \frac{25 - 10}{25} \times 10,000 = 6,000
\]

\[
\text{Diluted EPS = } \frac{100,000}{100,000 + 6,000}
\]

13. (b) Dilutive stock options are never used in calculating Basic EPS but are always used in Dilutive EPS.

14. (d) If the exercise price of the options exceeds the average market price, the computation would have the effect of increasing earnings per share (anti-dilution). The anti-dilutive effect should not be recognized in computing the earnings per share.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g., number of options</td>
<td>1,000</td>
</tr>
<tr>
<td>exercise price</td>
<td>$60</td>
</tr>
<tr>
<td>average market price</td>
<td>$50</td>
</tr>
</tbody>
</table>

Proceeds from exercise of options (1,000 additional shares issued) = 1,000 × $60 = $60,000. Above proceeds used to purchase stock at average market price: $60,000 ÷ $50 = 1,200 shares.

The net effect of the above is to decrease outstanding common shares by 200, which would increase earnings per share.

15. (c) A common stock option is always considered a potential common share but is only included in the calculation of EPS if the result is dilutive.

16. (a) Contingent shares are not considered outstanding for computation of Diluted EPS if the condition for their issuance is related to earnings or market value.

\[
\text{Diluted EPS} = \frac{14,000}{10,000} = 1.40
\]
17. (d) | Dates Outstanding | Shares Outstanding | Fraction of Year | Weighted Shares |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1 to March 31</td>
<td>15,000</td>
<td>× 3/12</td>
<td>= 3,750.00</td>
</tr>
<tr>
<td>April 1 to May 31</td>
<td>12,500</td>
<td>× 2/12</td>
<td>= 2,083.33</td>
</tr>
<tr>
<td>June 1 to December 31</td>
<td>17,000</td>
<td>× 7/12</td>
<td>= 9,916.67</td>
</tr>
</tbody>
</table>

Total weighted average shares = 15,750.00

Earnings per share = \( \frac{\text{Net Income}}{\text{Weighted average shares}} \)

\[ = \frac{125,000}{15,750} \approx 7.94 \text{ rounded} \]

Note: The stock options are antidilutive because the market price $25 is less than the option price. In other words, the options are useless. No one would exercise the options and pay $30 per share when the market price is $25.

18. (a) \( \frac{485,000 + (90,000 - 45,000)}{90,000 + 20,000 + 30,000} = 3.79 \), assuming conversion for the bonds is dilutive.

19. (b) \( \frac{850,000 + (80,000 - 24,000)}{110,000 + 20,000 + 30,000} = \frac{906,000}{160,000} = 5.66 \)

20. (c) Shares outstanding 1/1/YR5 = 600,000

Weighted average additional shares issued (9/12 × 180,000) = 135,000

Potential common shares = 150,000

Number of shares to be used in EPS calculation = 885,000

21. (d) A stock dividend or stock split that occurs during the year is retroactive to the beginning of the year, or if more than one year is presented, retroactive to the beginning of the earliest accounting period reported. In this case, the 6,000 shares issued (100,000 × 6%) for the stock dividend are retroactive to January 1, Year 3 and the number of shares used as a denominator in the calculation of earnings per share would be 106,000 (100,000 + 6,000).

22. (b) Shares outstanding 1/1/YR5 = 300,000

Shares issued 7/1/YR5—50,000 × 6/12 = 25,000

Potential common shares (options) = 10,000

Calculation for options: \( \frac{20–15}{20} \times 40,000 = 10,000 \)

23. (c) All asset (and related contra-asset) accounts which are directly identified with a company's segment are taken into account when testing to determine whether the segment is to be separately reported.

24. (b) Reportable segments are those for which segment revenue including intersegment sales comprise 10% or more of total revenues. Therefore, Bix and Dil are reportable segments—$12,000 and $59,000 are greater than $8,300.
25. (b) The test is 10% of all sales including intersegment sales. Therefore, any segment with revenues of $260,000 or more qualifies as a reporting segment.

26. (c) Those segments qualify which have 10% or more than the related totals of revenues, operating profit and assets. Therefore, segments A, B, C (all three tests), D (asset test), and E (asset and profit tests) qualify as reportable segments.

27. (d) Ebon, Fair and Gel would qualify as reportable segments under the 10% of combined revenue rule of ASC 280. Ebon, Fair and Hak would qualify as reportable segments using the 10% of identifiable assets rule. Since segments have to qualify under only one of the 10% rules, all segments qualify as reportable segments.

28. (d) ASC 280 requires disclosure of major customer data if sales to any major customer is 10% or more of consolidated revenues. Since consolidated revenues amount to $50,000,000, disclosure of major customer data would be required if sales to any single customer amount to $5,000,000. In addition the amount of revenue from each major customer must be disclosed plus the name of the segment making the sale.

29. (a) The calculation of weighted average number of common shares requires the retroactive recognition to the beginning of the year for stock dividends, stock splits, and pooling of interest for all periods presented. Non retroactive treatment would cause a false dilution of earnings per share in the current period as compared to previous periods.

30. (a) Since the preferred shares are nonconvertible, the requirement is to calculate the weighted average number of common shares for Basic Earnings per share.

<table>
<thead>
<tr>
<th>Date</th>
<th>shares outstanding</th>
<th>x</th>
<th>fraction =</th>
<th>weighted average</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1 Balance</td>
<td>120,000</td>
<td>x</td>
<td>6/12</td>
<td>60,000</td>
</tr>
<tr>
<td>July 1 Issue</td>
<td>40,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 1 Balance</td>
<td>160,000</td>
<td>x</td>
<td>6/12</td>
<td>80,000</td>
</tr>
</tbody>
</table>

Weighted average common shares = 140,000

31. (d) ASC 280 requires the disclosure of interest expense and extraordinary items in the reporting of segment data. For a list of the 9-10 items that should be disclosed, please see page 5-7 in the textbook.

32. (a) Both Profit or loss and total assets are required segment disclosures under ASC 280 (see Information to be disclosed by operating segment section B and C page 5-7).

33. (a) ASC 280 uses three ten percent quantitative threshold test to identify segments of sufficient size to warrant separate disclosures. They are the 10% Revenue test, the 10% profit and loss test and the 10% Asset test. The pronouncement does not provide for a 10% liability test.

34. (c) The numerator would be the net income of $600,000 plus the bond interest expense of $470,000 minus the tax effect of $117,500 for a total of $952,500. The interest expense is the cash interest (9% X $5,000,000 = $450,000) plus the amortization of the bond discount of $20,000 for a total of $470,000. The tax effect is the bond interest of $470,000 x 25% tax rate for a total of $117,500.

35. (c) Both IFRS and US GAAP must report the EPS effect of continuing operations.

36. (b) Only US GAAP is required to report the EPS effect of extraordinary items and discontinued operations.
37. (c) Basic EPS and diluted EPS must be reported by IFRS and US GAAP.

38. (d) To qualify as a reportable segment the unit must meet one of the 10% revenue, profit and loss or asset test.

39. (c) The first step in selecting a reportable segment is to look at how management reports segments.
Chapter Five Simulation Exercise

This problem consists of Sections A and B

Part A:

ABC Company is authorized to issue 9,000,000 shares of $10 Par common stock. The Company does not have any potentially dilutive securities. Listed below is a summary of ABC’s common stock activities for Year 3:

1. Number of shares issued and outstanding on January 1, Year 3, 2,000,000 shares.
2. Declared and issued a 10% stock dividend on February 1, Year 3.
3. Issued 600,000 shares for cash on April 1, Year 3.
4. Declared and issued a 2 for 1 stock split on July 1, Year 3.
5. Purchased 400,000 shares of Treasury Stock on October 1, Year 3.

Required: Calculate the weighted average common shares outstanding for Year 3.

Part B: Research

What is the objective of reporting diluted earnings per share?
**Chapter Five Simulation Solution**

**A:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Transaction</th>
<th>Book Shares</th>
<th>Stock Dividend</th>
<th>A*</th>
<th>Stock Split</th>
<th>B**</th>
<th>Fraction of Year</th>
<th>Weighted Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 1</td>
<td>Balance</td>
<td>2,000,000</td>
<td>110%</td>
<td>2,200,000</td>
<td>x 2</td>
<td>4,400,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb 1</td>
<td>10% Stock Dividend</td>
<td>200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb 1</td>
<td>Balance</td>
<td>2,200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar 31</td>
<td>Balance</td>
<td>2,200,000</td>
<td>x 2</td>
<td>4,400,000</td>
<td>x 3/12</td>
<td>1,100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr 1</td>
<td>Issue Stock</td>
<td>600,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr 1</td>
<td>Balance</td>
<td>2,800,000</td>
<td>x 2</td>
<td>1,200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 1</td>
<td>2 for 1 split</td>
<td>2,800,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 1</td>
<td>Balance</td>
<td>5,600,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept 30</td>
<td>Balance</td>
<td>5,600,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct 1</td>
<td>Buy Treasury Stock</td>
<td>(400,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct 1</td>
<td>Balance</td>
<td>5,200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 31</td>
<td>Balance</td>
<td>5,200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Shares adjusted for stock dividend. Remember adjust all shares before the stock dividend. In this case it would only be the January 1 shares.*

**Shares adjusted for 2 for 1 stock split. Again, remember to adjust all shares before the stock split. In this case adjust the April 1 issued shares and the Jan 1 Balance.*

a. *Hint: It is sometimes helpful to bring down the balance in the adjusted shares before the issue of stock or before the purchase of treasury stock. This may be helpful in calculation of the fraction of the year. Notice the balance in column B at Jan 1 is 4,400,000 and that balance still exists at March 31 so that the balance was outstanding for three of the 12 months.*

b. *Same hint. Bring down the balance in the adjusted shares before the purchase of treasury stock. Notice that the balance in Column B at Apr 1 was 5,600,000 shares and that amount still exists at September 30 which is six months.*

c. *Same hint: The balance in Column B at October 1 was 5,200,000 and that balance still exists at December 31 so that balance was outstanding for three months.*

**B:**

FAS128.11

11. *The objective of diluted EPS is consistent with that of basic EPS—to measure the performance of an entity over the reporting period---while giving effect to all dilutive potential common shares that were outstanding during the period.*
Chapter Six
Price Level—Foreign Exchange: Accounting Standards Codification

Chapter Six includes ASC 255 and ASC 215

FINANCIAL REPORTING AND CHANGING PRICES........................................................................................................... 6-1
In General
Historical Cost/Constant Dollars
Current Cost Accounting
ASC 255

ACCOUNTING FOR FOREIGN CURRENCY – ASC 815 ........................................................................................................... 6-4
In General
Foreign Currency Transactions

FOREIGN CURRENCY AND ASC 815 – ACCOUNTING FOR DERIVATIVES AND HEDGING ACTIVITIES .................................................................................................................. 6-5
Fundamental Decisions
Foreign Currency Hedges
Speculation of Foreign Currency

A FAIR VALUE HEDGE OF AN ASSET WITH A FORWARD CONTRACT ................................................................. 6-6

A FAIR VALUE HEDGE OF AN ASSET USING A FOREIGN CURRENCY PUT OPTION........................................ 6-7

FAIR VALUE HEDGE OF FUTURE FIRM COMMITMENT USING A FORWARD CONTRACT AS A HEDGE .................................................................................................................. 6-8

HEDGE OF A NET INVESTMENT IN A FOREIGN CURRENCY ....................................................................................... 6-10

SPECULATION IN FOREIGN CURRENCY...................................................................................................................... 6-10

RESTATEMENT OF FOREIGN CURRENCY FINANCIAL STATEMENTS........................................................................ 6-11
Functional Currency
Functional Currency is the Local Currency
Functional Currency is the Reporting Currency
Functional Currency is Neither Local Currency nor Reporting Currency
Functional Currency in a Highly Inflationary Economy
Disclosure

IFRS............................................................................................................................................................................ 6-15
Chapter Six
Price Level—Foreign Exchange: Accounting Standards Codification

FINANCIAL REPORTING AND CHANGING PRICES

In General
Attributes of assets that accountants might measure are
- Historical cost or
- Current cost

The measuring units that can be used to measure either attribute are
- Nominal dollars or
- Constant dollars

As a result, there are four possibilities:

<table>
<thead>
<tr>
<th>Historical Cost</th>
<th>Current Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal dollars</td>
<td>Constant dollars</td>
</tr>
<tr>
<td>—1—</td>
<td>—2—</td>
</tr>
<tr>
<td>Nominal dollars</td>
<td>Constant dollars</td>
</tr>
<tr>
<td>—3—</td>
<td>—4—</td>
</tr>
</tbody>
</table>

This four-column characterization presents the framework of "Financial Reporting and Changing Prices," and it will be referred to in the discussion that follows.

Working definitions of these four terms follow:
- **Historical cost**—the historical exchange price experienced in an actual transaction.
- **Current cost**—the cost that would be incurred at the present time (its specific measurement is discussed later).
- **Nominal dollars**—dollars that are not adjusted to reflect changes in purchasing power.
- **Constant dollars**—dollars that are restated to reflect changes in purchasing power.

**Historical Cost/Constant Dollars**
To use the constant dollar measuring unit, price index numbers are the means with which to measure the effects of inflation. The Consumer Price Index-Urban (CPI-U) is the index that is used, and its amount is published monthly. Two index numbers are needed to restate nominal dollars into constant dollars. The period whose nominal dollars are being restated is called the base period, the period into whose dollars' purchasing power the nominal dollars are being restated is the current period.

\[
\text{Current period CPI-U} = \frac{\text{conversion factor}}{\text{Base period CPI-U}}
\]

**Example:**
To restate land purchased in January 19X2 for $10,000 into December 19X8 constant dollars, use the appropriate CPI-U numbers.

\[
\begin{align*}
\text{(December 19X8 =)} & \quad 180 = 1.5 \\
\text{(January 19X2 =)} & \quad 120
\end{align*}
\]

The result is that $10,000 is restated into \((10,000 \times 1.5) = 15,000\) in the December 31, 19X8, constant dollar balance sheet. FASB Statement No. 33 allows as an acceptable alternative to have the numerator contain the weighted average CPI-U for the current year, thus

\[
\begin{align*}
\text{(19X8 average =)} & \quad 168 = 1.4 \\
\text{(January 19X2 =)} & \quad 120
\end{align*}
\]
In average 19X8 constant dollars, the restated cost basis of the land would be ($10,000 \times 1.4 =) $14,000.

In the CPA Exam, you will be told whether the constant dollar is based on the year-end CPI-U or the year-average CPI-U.

**Monetary items** are sums of money whose amount is fixed or determinable without reference to future prices of specific goods or services. They include cash, and those receivables and payables which will be discharged in cash. Such receivables and payables qualify irrespective of their being current or noncurrent. All other financial statement amounts are nonmonetary, e.g., investments (except an investment in debt securities which will be held until maturity—which would be a monetary asset), inventory, plant assets, intangibles, owners' equity balances, revenues and expenses. The monetary-nonmonetary distinction applies when accounting measurements use constant dollars as the measuring unit:

- Only nonmonetary items **are restated** from nominal dollars into constant dollars.
- Gains or losses are **not recognized** as a result of restating nonmonetary items.
- Monetary items are **not restated**—because their sums are fixed.
- Gains or losses **are recorded** to reflect the increase or decrease in purchasing power that results from holding monetary items during inflation.

**Example:** Assuming that the year-end dollar is the constant dollar, if a company holds $3,000 cash and $7,000 land bought in January 19X7 and during 19X7 the CPI-U moves from 100 to 120, the constant dollar balance sheet as of December 31, 19X7, would disclose $3,000 cash and [$7,000 \times (120/100 =) 1.2 =] $8,400 land. The constant dollar income statement would contain a ($3,000 \times .2 =) $600 purchasing power loss.

**Restatement of a depreciable asset** entails restating the related accumulated depreciation and depreciation expense amounts with the same conversion factor used to restate the asset proper. Thus, if the $7,000 land in the last example had instead been a machine being depreciated at a rate of $1,400 per year for 5 years, the constant dollar financial statements would contain the following amounts:

<table>
<thead>
<tr>
<th></th>
<th>19X7</th>
<th>19X8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current index</strong></td>
<td>120</td>
<td>156</td>
</tr>
<tr>
<td><strong>Machinery:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7,000 \times 1.2)</td>
<td></td>
<td>$8,400</td>
</tr>
<tr>
<td>(7,000 \times 1.56)</td>
<td></td>
<td>$10,920</td>
</tr>
<tr>
<td><strong>Depreciation expense:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1,400 \times 1.2)</td>
<td></td>
<td>$1,680</td>
</tr>
<tr>
<td>(1,400 \times 1.56)</td>
<td></td>
<td>$2,184</td>
</tr>
<tr>
<td><strong>Accumulated depreciation:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1,400 \times 1.2)</td>
<td></td>
<td>$1,680</td>
</tr>
<tr>
<td>(2,800 \times 1.56)</td>
<td></td>
<td>$4,368</td>
</tr>
</tbody>
</table>

If the $7,000 machinery account had consisted of 3 machines that had been bought at different dates, the cost of each machine is restated individually and the 3 restated amounts are then added together.

<table>
<thead>
<tr>
<th>Date acquired</th>
<th>Machine A</th>
<th>Machine B</th>
<th>Machine C</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base index number</td>
<td>March 19X5</td>
<td>August 19X6</td>
<td>January 19X7</td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>$4,000</td>
<td>$2,000</td>
<td>$1,000</td>
<td>$7,000</td>
</tr>
</tbody>
</table>

**Conversion factor:**

<table>
<thead>
<tr>
<th></th>
<th>19X7</th>
<th>19X8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 31, 19X7</td>
<td>120 = 1.50</td>
<td>120 = 1.33</td>
</tr>
<tr>
<td></td>
<td>80 90 100</td>
<td></td>
</tr>
<tr>
<td>Dec. 31, 19X8</td>
<td>156 = 1.95</td>
<td>156 = 1.73</td>
</tr>
<tr>
<td></td>
<td>80 90 100</td>
<td></td>
</tr>
</tbody>
</table>
Constant dollars:

<table>
<thead>
<tr>
<th></th>
<th>Dec. 31, 19X7</th>
<th>$6,000</th>
<th>$2,666</th>
<th>$1,200</th>
<th>$ 9,866</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec. 31, 19X8</td>
<td>7,800</td>
<td>$3,460</td>
<td>$1,560</td>
<td>$12,820</td>
</tr>
</tbody>
</table>

If the nonmonetary asset had been Inventory (instead of Land or Machinery), it would be necessary to restate both the asset and the cost of goods sold by using the appropriate conversion factor.

The purchasing power gain/loss is the gain/loss from holding monetary items. The calculation of the gain or loss is now illustrated in an example for which the following index numbers apply:

- December 19X1: 110
- December 19X2: 132
- Average for 19X2: 120

Reference to the beginning and ending balance sheets yields the following information. Assuming the average-for-the-year dollar is the constant dollar (i.e., the year-average CPI-U), the purchasing power gain is $454, as follows:

<table>
<thead>
<tr>
<th>Monetary assets</th>
<th>January 1</th>
<th>December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$10,000</td>
<td>$12,000</td>
</tr>
<tr>
<td>Monetary liabilities</td>
<td>$7,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Net monetary assets (liabilities)</td>
<td>$3,000</td>
<td>$(8,000)</td>
</tr>
</tbody>
</table>

Nominal Conversion Constant

dollars factor dollars

- Net monetary assets (liabilities):
  - January 1: $10,000 – $7,000: $3,000
  - In 19X2: (8,000) – $3,000: (11,000)
- Net monetary assets (liabilities):
  - December 31: $12,000 – ($20,000): $(8,000)

Purchasing power gain

The discussion to this point has dealt with the historical cost/constant dollar approach. Certain amounts that would appear in historical cost/constant dollar financial statements may be presented by corporations in schedular form as a supplement to their basic historical cost/nominal dollar financial statements, to be discussed later.

Current Cost Accounting

A second aspect of the expanded financial reporting disclosures set forth in ASC 255 entails disclosing certain amounts which would appear in current cost/constant dollar financial statements. These are the data that result in the approach depicted in Column 4 of the framework (which appeared in the first paragraph of the discussion). To understand the nature of that approach, we will deal initially with current cost data using the nominal dollar measuring unit, Column 3 in the framework.

The current cost of an asset is the current replacement cost of the asset owned, adjusted for the value of any operating advantages or disadvantages of the asset owned. However, it may not exceed the recoverable amount, which is the higher of the net realizable value or the net present value of the future cash flows.

Use of current cost as the attribute of assets to be measured is implemented either by indexation or by direct pricing. The "indexation" approach should not be confused with general price index numbers (CPI-U) that are used to restate nominal dollars into constant dollars. Instead, it refers to specific indices that are generated either internally or externally for particular classes of goods and services. Direct pricing can be effected by reference to current invoice prices, vendors' price lists or standard manufacturing costs that reflect current costs.

When revaluing an asset to reflect its current cost, the resulting increase (or decrease) from its previous valuation is a holding gain (or a holding loss) and in theory would be recognized as such in a current-cost income statement. For example, if the value of land that had been purchased for $10,000 were to increase subsequently to $16,000, the...
land asset account would be increased to $16,000, and a $6,000 holding gain would appear in the current-cost income statement. An ASC 255 current-cost income statement differs from a historical cost income statement in another important respect as well; namely, it reflects depreciation expense and cost of goods sold at their current cost. The holding gain (or loss) would not be a component of Income from Continuing Operations, however.

Proceeding now to the current cost/constant dollar approach (Column 4 in the framework), we observe its dominant characteristics:

- Monetary assets and monetary liabilities are not restated in the balance sheet.
- The effect of inflation on monetary assets and monetary liabilities is calculated and disclosed in the income statement as the purchasing power gain or loss in the manner described earlier.
- Nonmonetary assets (plant assets and inventory) appear in the balance sheet at their current cost, and related expenses appear in the income statement at their current cost (depreciation expense and cost of goods sold).
- The change in the current cost of nonmonetary assets (the holding gain or loss) reflects the change only to the extent not caused by general inflation; an example follows.

Assume that land had been purchased in March for $12,000 when the CPI-U was 130. On December 31, the current cost of the land is $15,000 and the CPI-U is 156. The asset would be valued as $15,000, and assuming the constant dollar is based on the year-end CPI-U, the holding gain that appears in the income statement would be $600. The $600 is based on the following calculation:

\[ 15,000 - \left( 12,000 \times \frac{156}{130} = 1.2 \right) \times 14,400 = 600 \]

**ASC 255**

The primary disclosure rules set forth by ASC 255 are as follows:

1. Disclosures are optional for all companies.
2. The disclosures, if applied, are a supplement to, not a substitute for, financial statements prepared in the traditional (historical cost/nominal dollar) manner.
3. The specific items suggested for disclosure are:
   - Purchasing power gain or loss from holding monetary assets and owing monetary liabilities.
   - Income from continuing operations—with cost of goods sold and depreciation expense on a current cost/constant dollar basis.
   - Inventory and plant assets on a current-cost basis.
   - Changes in the current cost/constant dollar amounts of inventory and plant assets (the holding gain or loss).
   - Five-year comparison of selected historical cost and current cost data—expressed in constant dollars (e.g., sales, dividends per share, market price per share, and some of the already computed amounts).
4. Constant dollars can reflect either end-of-year or average-for-the-year purchasing power. In the five-year summary, however, constant dollars could also reflect the purchasing power of the base year used by the Bureau of Labor Statistics (which is currently 1967).

**ACCOUNTING FOR FOREIGN CURRENCY—ASC 815**

**In General**

This statement encompasses both expressing in dollars transactions denominated in a foreign currency, and expressing in dollars the foreign-currency-based financial statements of a subsidiary.

To incorporate foreign currency transactions and foreign currency financial statements in its financial statements, include all assets, liabilities, revenue and expenses that are measured in foreign currency or denominated in foreign currency.

Measure—To quantify an attribute of an item in a unit of measure other than the reporting currency.

Denominate—When asset and liability amounts are fixed in terms of a foreign currency regardless of exchange rate changes.

**Illustration:** Two foreign branches of a U.S. company, one Swiss and one German, purchase on credit identical assets from a Swiss vendor at identical prices stated in Swiss francs. The German branch measures the cost (an
attribute) of that asset in German marks. Although the corresponding liability is also measured in marks, it remains denominated in Swiss francs since the liability must be settled in a specified number of Swiss francs. The Swiss branch measures the asset and liability in Swiss francs. Its liability is both measured and denominated in Swiss francs. Assets and liabilities can be measured in various currencies. However, currency and rights to receive or obligations to pay fixed amounts of a currency are denominated only in that currency.

Foreign Currency Transactions
These are transactions which are denominated in a foreign currency. A change in the exchange rate between the foreign currency and the dollar results in a gain or loss that is recognized in determining the dollar net income for the period in which the rate changes. (No gain or loss is recognized on hedges of net investments in foreign currency commitments.)

Example—On December 20, a U.S. company purchases inventory from a foreign company for an invoice price of LCU 300,000 when the exchange rate is LCU 6 = $1. The invoice is due in 30 days. On December 31, the exchange rate is LCU 8 = $1 and on the payment date, the exchange rate is LCU 7.5 = $1.

The company would make the following journal entries (in U.S. dollars)

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Amount</th>
<th>Exchange Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/20</td>
<td>Purchase</td>
<td>$50,000</td>
<td>(LCU 300,000 ÷ 6)</td>
</tr>
<tr>
<td></td>
<td>Accounts Payable</td>
<td>$50,000</td>
<td></td>
</tr>
<tr>
<td>12/31</td>
<td>Accounts Payable</td>
<td>$12,500</td>
<td>(LCU 300,000 ÷ 6)</td>
</tr>
<tr>
<td></td>
<td>Exchange Gain</td>
<td>$12,500</td>
<td></td>
</tr>
<tr>
<td>1/19</td>
<td>Accounts Payable</td>
<td>$37,500</td>
<td>(LCU 300,000 ÷ 8)</td>
</tr>
<tr>
<td></td>
<td>Exchange loss</td>
<td>2,500</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>$40,000</td>
<td>(LCU 300,000 ÷ 7.5)</td>
</tr>
</tbody>
</table>

FOREIGN CURRENCY AND ASC 815 – ACCOUNTING FOR DERIVATIVES AND HEDGING ACTIVITIES

ASC 815 looks at foreign currency in the following areas:

Fundamental Decisions
a. Derivative instruments that meet the definition of assets and liabilities should be reported in the financial statements.
b. Fair value is the only relevant measure for derivative instruments.

Foreign Currency Hedges
- Fair Value Hedge of an exposed asset or liability.
  Gains and losses are recognized currently.
- Fair Value Hedge of a firm commitment.
  Gains and losses are recognized currently.
- Cash Flow Hedge of a forecasted transaction denominated in foreign currency.
  Gains and losses are recognized in comprehensive income
- Hedge of a Net Investment in a foreign entity.
  Gains or losses are reported in comprehensive income as part of the translation adjustment.

Speculation of Foreign Currency
Gain and losses are recognized currently based on foreign exchange rates.
A FAIR VALUE HEDGE OF AN ASSET WITH A FORWARD CONTRACT

The Beal Company sells goods to a German Company for 1,000,000 marks on December 15, 1999 and allows the customer 30 days to pay the invoice. The spot rate at that time is $.58 and the company appropriately records a sale of $580,000.

Beal Company is concerned about the fluctuation in the German mark and on December 31, 1999 enters into a 30-day forward contract hedge to sell 1,000,000 marks for $570,000 to AMEX at the forward rate of $.57. At this point, Beal has "locked-in" the amount of cash it will receive from the 1,000,000 marks and eliminated any further risk from foreign currency changes.

Listed below is a table of the changes in exchange rates:

<table>
<thead>
<tr>
<th>DATE</th>
<th>SPOT RATE</th>
<th>30 DAY FORWARD RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 15, 1999</td>
<td>$.58</td>
<td>$.57</td>
</tr>
<tr>
<td>December 31, 1999</td>
<td>.59</td>
<td>.585</td>
</tr>
<tr>
<td>January 15, 2000</td>
<td>.56</td>
<td>.56</td>
</tr>
</tbody>
</table>

Journal Entries:

December 15, 1999

- Accounts Receivable (DM) 580,000
- Sales 580,000

To record the sale at the current spot rate.

Note: No entry is made to record the forward contract because its value is zero.

December 31, 1999

- Accounts Receivable (DM) 10,000
- Foreign Currency Transaction Gain 10,000

To adjust the accounts receivable to the Dec. 31 spot rate of $.59 which is $.01 above the December 15 rate (1,000,000 marks x .01 = 10,000).

December 31, 1999

- Loss on Forward Contract 15,000
- Forward Contract (Liability) 15,000

ASC 815 requires Beal Company to record the forward contract at fair value and to recognize the loss in current earnings. The calculation is the change in the forward rate from $.57 to $.585 or $.015 x 1,000,000 marks = $15,000. Since the current rate is $.585, a forward contract for marks at $.57 is less valuable and a loss should be recognized.

January 15, 2000

- Foreign Currency transaction loss 30,000
- Accounts Receivable (DM) 30,000

To adjust the accounts receivable for the decrease in the spot rate since December 31, 1999 ($.59 - $.56 = $.03 x 1,000,000 marks = $30,000).
January 15, 2000  
**Forward Contract (Asset)**  25,000  
**Gain on Forward Contract**  25,000  

The change in the value of the forward rate from December 31, 1999 to January 15, 2000 is $0.025 ($0.585 - $0.56) x 1,000,000 marks = $25,000.

January 15, 2000  
**Foreign Currency (DM)**  560,000  
**Accounts Receivable (DM)**  560,000  

To record the receipt of 1,000,000 marks at the current spot rate of $0.56 for a total of $560,000.

January 15, 2000  
**Cash**  570,000  
**Foreign Currency (DM)**  560,000  
**Forward Contracts**  10,000  

To record the sale of 1,000,000 marks to AMEX on the forward contract for $570,000 and to remove the forward contract from the books.

---

**A FAIR VALUE HEDGE OF AN ASSET USING A FOREIGN CURRENCY PUT OPTION**

As an alternative to the forward contract, Beal Company could hedge its accounts receivable exposure to fluctuations in the value of the mark by purchasing a foreign currency put option. A put option gives Beal the right to sell 1,000,000 marks on January 15, 2000 at a pre-determined price. If the spot rate on January 15 is less than the option price, Beal will exercise the option and sell the 1,000,000 marks. If the spot rate is greater than the option price, Beal will allow the option to expire and sell the 1,000,000 marks at the spot rate. The advantage to Beal is that it does not have to exercise the option.

Using the same basic information as the first example, assume that Beal buys a put option on December 15, 1999 for $9,000 to sell 1,000,000 marks at $0.57 on January 15, 2000.

<table>
<thead>
<tr>
<th>DATE</th>
<th>SPOT RATE</th>
<th>FAIR VALUE</th>
<th>CHANGE IN FAIR VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 15, 1999</td>
<td>$0.58</td>
<td>$9,000</td>
<td>-0-</td>
</tr>
<tr>
<td>December 31, 1999</td>
<td>$0.59</td>
<td>$6,000</td>
<td>- $3,000</td>
</tr>
<tr>
<td>January 15, 2000</td>
<td>$0.56</td>
<td>$10,000</td>
<td>+ $4,000</td>
</tr>
</tbody>
</table>

The journal entries for the transactions will be the same as the first example, so concentrate on the entries affecting the put option.
December 15, 1999

Accounts Receivable (DM) 580,000
  Sales 580,000
Foreign Currency Option (asset) 9,000
  Cash 9,000

To record the purchase of the put option.

December 31, 1999

Accounts Receivable (DM) 10,000
  Foreign Currency Transaction Gain 10,000
  Loss on Foreign Currency Option 3,000
  Foreign Currency Option 3,000

To record the loss on the foreign currency option.

January 15, 2000

Foreign Currency transaction loss 30,000
  Accounts Receivable (DM) 30,000
Foreign Currency Option 4,000
  Gain on Foreign Currency Option 4,000

January 15, 2000

Foreign Currency (DM) 560,000
  Accounts Receivable (DM) 560,000

January 15, 2000

Cash 570,000
  Foreign Currency (DM) 560,000
  Foreign Currency Option 10,000

To record the exercise of the put option at the option price of $0.57 and remove the foreign currency option from the books.

Note: The option was exercised because the option price of $0.57 was greater than the spot rate of $0.56.

FAIR VALUE HEDGE OF FUTURE FIRM COMMITMENT USING A FORWARD CONTRACT AS A HEDGE

In our previous examples, Beal did not hedge its transactions until the sale was made and the concern was for the exposure of its accounts receivable. Another approach would be for Beal to hedge its transaction when an order is received (a firm commitment).

Assume that Beal received an order on November 15, 1999 in the amount of 1,000,000 German marks for delivery within 60 days. Assume further that payment will be due on the delivery date of January 14, 1999 (60 days). On November 15, 1999, Beal enters into a 60-day forward contract to sell 1,000,000 German marks at the forward rate of $0.54.
FORWARD RATE
  to 1/14/2000

11/15/99     .54
12/31/99     .55
1/14/00     .535

Journal Entries:

November 15, 1999
No Entry
The fair value of the forward contract is zero.

December 31, 1999
Loss on Forward Contract 10,000
Forward Contract (liability) 10,000

The loss on the forward contract is the change in the forward rate of $.01 x 1,000,000 marks = $10,000 (.54 - .55 = -.01)

December 31, 1999
Firm Commitment (asset) 10,000
Gain on Firm Commitment 10,000

To record an offsetting gain on the firm commitment.

January 15, 2000
Forward Contract (asset) 15,000
Gain on Forward Contract 15,000

To record gain in the change of the rates from December 31.
(.55 - .535) = .015 x 1,000,000 = $15,000

January 15, 2000
Loss on Firm Commitment 15,000
Firm Commitment 15,000

To record offsetting loss on firm commitment.

January 15, 2000
Foreign Currency (DM) 535,000
Sales 535,000

To record the sale and receipt of 1,000,000 DM at the current spot rate of $.535.

January 15, 2000
Cash 540,000
Foreign Currency (DM) 535,000
Forward Contract 5,000

To record the sale of the 1,000,000 marks at the forward contract rate of $.54 and to remove the forward contract from the books.

January 15, 2000
Firm commitment 5,000
Sales 5,000

The firm commitment and the foreign currency offset and the sales are exactly equal to the cash received (535,000 + 5,000) = $540,000.
HEDGE OF A NET INVESTMENT IN A FOREIGN OPERATION

ASC 815 requires U.S. companies with foreign subsidiaries whose functional currency is the local currency to translate the subsidiary's financial statements into U.S. dollars using the current-rate method. This method produces a translation adjustment for the period that is reported as other comprehensive income.

Companies wanting to hedge its fluctuation from the translated adjustment may use a forward contract or may borrow funds in the local currency.

To hedge the foreign currency exposure, the translation adjustment from the hedging activity must move in the opposite direction from the translation adjustments of the net assets of the subsidiary.

Since our previous examples have all used forward contract, this illustration will use a loss as a hedge.

Assume that the Beal Corp. has an investment in a foreign German subsidiary equal to 10,000,000 marks which at the current spot rate of $.54 would translate into $5,400,000. To hedge its equity investments, Beal borrows 10,000,000 marks for a year on January 1, 2000. Assume that the spot rate for marks on December 31, 2000 is $.51.

Journal Entries:

January 1, 2000

| Cash | 5,400,000 |
| Loan Payable | 5,400,000 |

December 31, 2000

| Loan Payable | 300,000 |
| Gain on Loan – Other Comprehensive Income | 300,000 |

The gain on the loan would be the change in the spot rate from $.54 to $.51 at the end of the year for a net change of $.03 x 10,000,000 = $300,000.

Note: ASC 815 allows the gain on the loan – other comprehensive income to offset the translated adjustment associated with translating the foreign financial statement into U.S. dollars.

SPECULATION IN FOREIGN CURRENCY

A foreign contract does not have to be used as a hedge; it may be used for speculation. As with any derivative financial instrument, ASC 815 requires the forward contract to be recorded at fair value and any gains or losses reported in current earnings.

For example, Beal Company expects the value of the German mark to increase in the next 90 days. Accordingly, on December 1, 1999, Beal enters into a 90-day forward contract to buy 1,000,000 marks at the forward rate of $.52.

On December 31, 1999 the forward rate was $.53 and by March 1, 2000 the spot rate had moved to $.55.
Journal Entries:

December 1, 1999  No Entry – the forward contract is at fair value.

December 31, 1999  Forward Contract  10,000  Gain on Forward Contract  10,000

Increase in forward rate from $.52 to $.53 = $.01 x 1,000,000 marks = $10,000.

March 1, 2000  Forward contract  20,000  Gain on Forward contract  20,000

Increase in forward rates from December 31 to March 1 ($.53 to $.55) = $.02 x 1,000,000 marks.

March 1, 2000  Investment in German Marks  520,000  Cash  520,000

To record the purchase at the forward contract rate of $.52 x 1,000,000 marks = $520,000.

March 1, 2000  Cash  550,000  Investment in German Marks  520,000  Forward Contract  30,000

To record the sale of 1,000,000 marks at the current spot rate of $.55.

RESTATEMENT OF FOREIGN CURRENCY FINANCIAL STATEMENTS

Functional Currency

The rules for expressing foreign currency in dollars depend upon the functional currency involved. An entity's functional currency is the currency of the primary economic environment in which the entity operates; normally, that is the currency of the environment in which an entity primarily generates and expends cash.

Once the functional currency of an entity is determined, such determination remains in effect unless significant changes in the economic facts and circumstances warrant a change in the functional currency.

Functional Currency is the Local Currency

If an entity's operations are relatively self-contained within a particular foreign country, then that country's currency (local currency) would be the functional currency. An example would be an entity whose operations are not integrated with those of the parent, whose buying and selling activities are primarily local, and whose cash flows are primarily in the foreign currency. Since the local currency is the functional currency, the company's financial statements would be translated to U.S. dollars using the current-rate method.

Current-rate method procedures:

- The assets and liabilities of an entity are translated using the current rate which means the exchange rate at the balance sheet date.
- Equity accounts are translated using historical exchange rates.
- Revenues, expenses, gains, and losses use the weighted average exchange rate for the period.
- The resulting translation adjustment for the current period is reported as other comprehensive income net of tax.
- The cumulative translation adjustment is reported as a part of the accumulated other comprehensive income in the equity section of the statement of financial position.
- Reclassification of Translation Adjustments:
1. ASC 815 states that if an enterprise sales part of its ownership interest in a foreign entity, a pro rata portion of the accumulated translation adjustment attributable to that investment shall be recognized in measuring the gain or loss on the sale in the current period.

2. Since this portion of the translation adjustment would have been recognized in previous periods as other comprehensive income, the translation adjustment would have to be reclassified ("reversed out") in other comprehensive income of the current period to avoid a double counting of the translation adjustment gain or loss.

**Functional Currency is the Reporting Currency**

If the foreign entity is a branch or extension of its U.S. parent, its functional currency would likely be the U.S. dollar (reporting currency). An example would be an entity whose operations are integrated with those of the parent, whose buying and selling activities are primarily in the parent's country and/or the parent's currency, and whose cash flows are available for remittance to the parent. Since the reporting currency is the functional currency, the financial statements would be expressed in dollars using the remeasurement method.

Remeasurement method procedures:
Balance sheet accounts are placed in two categories -- monetary and nonmonetary. Monetary items include cash, and those receivables and payables which represent a fixed amount of cash, as opposed, for instance, to an unearned revenue liability which will be satisfied with goods or services. The fact that a receivable or payable is classified as current or noncurrent has no effect on its being monetary in nature. All other balance sheet items are nonmonetary (except an investment in debt securities which will be held until maturity -- which would be a monetary asset).

- Monetary assets and liabilities are remeasured at the current exchange rate.
- Non-monetary accounts are remeasured using the historical exchange rates.
- Revenues, expenses, gains and losses use the weighted average exchange rate for the period except for cost allocations such as depreciation expense which uses the historical rate.
- Foreign exchange gains and losses are reported on the consolidated income statement.

**Functional Currency is Neither Local Currency nor Reporting Currency**

If the functional currency is a foreign currency other than the local currency, then the foreign currency statements are first remeasured in the functional currency before they are translated to U.S. dollars using the current rate method.

*Example:* Park Company, a U.S. parent, has a wholly-owned subsidiary, Schnell Corp., which maintains its accounting records in German marks. Because all of Schnell's branch offices are in Switzerland, its functional currency is the Swiss franc. Since the functional currency is the Swiss franc, the financial statements of the subsidiary must first be remeasured from German marks into Swiss francs and a foreign exchange remeasurement gain or loss must be recognized.

The remeasured financial statements are then translated into U.S. Dollars and a foreign exchange translation gain or loss is calculated. The consolidated financial statements would then report a foreign exchange remeasurement gain or loss on the Income Statement and a translation gain or loss would be reported as other comprehensive income.

**Functional Currency in a Highly Inflationary Economy**

If a foreign entity is located in a country that is experiencing high inflation (if the cumulative inflation rate is \( \geq \) 100% over a 3-year period), the foreign currency is considered unstable. In this case, the foreign currency statements are remeasured into the reporting currency (the U.S. dollar).
Disclosure

An analysis of the changes during the period in the separate component of other comprehensive income and for the "cumulative translation adjustment" portion of accumulated other comprehensive income is provided in a separate financial statement, in notes to the financial statements, or as part of a statement of changes in equity. At a minimum, the analysis discloses:

a. Beginning and ending amount of cumulative translation adjustments.
b. The aggregate adjustment for the period resulting from translation adjustments and gains and losses from certain hedges and intercompany balances.
c. The amount of income taxes for the period allocated to translation adjustments.
d. The amounts transferred from cumulative translation adjustments and included in determining net income for the period as a result of the sale or complete or substantially complete liquidation of an investment in a foreign entity.

An enterprise's financial statements are not adjusted for a rate change that occurs after the date of the enterprise's financial statements or after the date of the foreign currency statements of a foreign entity if they are consolidated, combined, or accounted for by the equity method in the financial statements of the enterprise. However, disclosure of the rate change and its effects on unsettled balances pertaining to foreign currency transactions, if significant, may be necessary.

Example: Financial statements of the Peso Corporation, a foreign subsidiary of the Dollar Corporation (a U.S. company) are shown below at and for the year ended December 31, 199X. The statements are first translated using the LCU (local currency unit) as the functional currency (translation method), then the dollar as the functional currency (remeasurement).

Assumptions:
1. The parent company organized the subsidiary on December 31, 199W.
2. Exchange rates for the LCU were as follows:
   - December 31, 199W to March 31, 199X: $0.18
   - April 1, 199X to June 30, 199X: $0.13
   - July 1, 199X to December 31, 199X: $0.10
3. Inventory was acquired evenly throughout the year and sales were made evenly throughout the year.
4. Fixed assets were acquired by the subsidiary on December 31, 199W.
Peso Corporation
Foreign Currency Financial Statements, Expressed in Dollars
at and for the year ended December 31, 199X

<table>
<thead>
<tr>
<th>Income Statement</th>
<th>Current Rate Method</th>
<th>Remeasurement Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exchange Rate</td>
<td>Dollars</td>
</tr>
<tr>
<td>Sales</td>
<td>LCU 525,000</td>
<td>$66,938</td>
</tr>
<tr>
<td>Costs and expenses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>LCU 400,000</td>
<td>$51,000</td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>22,000</td>
<td>2,805</td>
</tr>
<tr>
<td>Selling expenses</td>
<td>31,000</td>
<td>3,953</td>
</tr>
<tr>
<td>Other operating expenses</td>
<td>11,000</td>
<td>1,403</td>
</tr>
<tr>
<td>Income taxes expense</td>
<td>19,000</td>
<td>2,423</td>
</tr>
<tr>
<td>Total costs and expenses</td>
<td>LCU 483,000</td>
<td>$61,584</td>
</tr>
<tr>
<td>Currency exchange (gain)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>LCU 42,000</td>
<td>$ 5,354</td>
</tr>
</tbody>
</table>

Other Comprehensive Income
Foreign Currency Translation Adjustments | $(17,154) |

Comprehensive Loss | $(11,800) |

Statement of Retained Earnings
- Retained earnings, beg. of year: LCU —0—, —0—, —0—
- Net income: 42,000
- Retained earnings, end of year: LCU 42,000, 5,354, 11,053

Balance Sheet—Assets
- Cash: LCU 10,000, $.10, $1,000
- Accounts receivable (net): 50,000, $.10, 5,000
- Inventories (at cost): 95,000, $.10, 9,500
- Fixed assets: 275,000, $.10, 27,500
- Accumulated depreciation: 22,000, $.10, (2,200)
- Total assets: LCU 408,000, $40,800, $63,653

Liabilities & Stockholders' Equity
- Accounts payable: LCU 34,000, $.10, $3,400
- Long-term debt: 132,000, $.10, 13,200
- Common stock 10,000 shares: 200,000, $.18, 36,000
- Retained earnings: 42,000, 5,354, 11,053
- Accumulated other comprehensive income: (17,154)
- Total liabilities & stockholders' equity: LCU 408,000, $40,800, $63,653

\[
\begin{align*}
1 & \quad (\$.18 \times 3) + (\$.13 \times 3) + (\$.10 \times 6) = .1275 \\
2 & \quad \text{Residual amount (to balance).} \\
3 & \quad \frac{22,000}{275,000} = \frac{x}{49,500} \quad \text{or} \quad x = 3,960 \text{ (or $.18 in this case)}
\]
**IFRS**

Foreign currency and derivatives IFRS requires that an entity report its measurement currency. This US does not have this rule. For example, if a Japanese company chooses to report its financial statements in US currency instead of Japanese yen, that fact should be noted.

The accounting for derivatives is basically the same between IFRS and US GAAP. One minor difference exists in the definition of a derivative. Under US GAAP, a net settlement must be required or permitted. IFRS does not have this requirement.

<table>
<thead>
<tr>
<th><strong>FAST TRACK SUMMARY</strong></th>
<th><strong>IFRS</strong></th>
<th><strong>US GAAP</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting currency</td>
<td>Specify the measurement currency</td>
<td>Not required</td>
</tr>
<tr>
<td>Definition of derivative</td>
<td>Not required</td>
<td>Net settlement must be required or permitted</td>
</tr>
</tbody>
</table>
Chapter Six
Price Level—Foreign Exchange Questions

FINANCIAL REPORTING AND CHANGING PRICES

Items 1 and 2 are based on the following information:

The following schedule lists the general price-level index at the end of each of the five indicated years (assume that the year-end dollar is the constant dollar):

<table>
<thead>
<tr>
<th>Year</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>100</td>
</tr>
<tr>
<td>1996</td>
<td>110</td>
</tr>
<tr>
<td>1997</td>
<td>115</td>
</tr>
<tr>
<td>1998</td>
<td>120</td>
</tr>
<tr>
<td>1999</td>
<td>140</td>
</tr>
</tbody>
</table>

1. In December 1998, the Meetu Corporation purchased land for $300,000. The land was held until December 1999, when it was sold for $400,000. The historical cost/constant dollar statement of income for the year ended December 31, 1999, should include how much gain or loss on this sale assuming that the year-end dollar is the constant dollar?
   a. $20,000 loss.
   b. $20,000 general price-level loss.
   c. $50,000 gain.
   d. $100,000 gain.

2. On January 1, 1996, the Silver Company purchased equipment for $300,000. The equipment was being depreciated over an estimated life of 10 years on the straight-line method, with no estimated salvage value. On December 31, 1999, the equipment was sold for $200,000. The historical cost/constant dollar statement of income for the year ended December 31, 1999, should include how much gain or loss on this sale assuming that the year-end dollar is the constant dollar?
   a. $20,000 loss.
   b. $20,000 general price-level loss.
   c. $50,000 gain.
   d. $100,000 gain.

3. In its financial statements, Hila Co. discloses supplemental information on the effects of changing prices in accordance with Statement of Financial Accounting Standards No. 89, Financial Reporting and Changing Prices. Hila computed the increase in current cost of inventory as follows:

   | Increase in current cost (nominal dollars) | $15,000 |
   | Increase in current cost (constant dollars) | $12,000 |

   What amount should Hila disclose as the inflation component of the increase in current cost of inventories?
   a. $3,000.
   b. $12,000.
   c. $15,000.
   d. $27,000.

4. The Chalk Company reported sales of $2,000,000 in 1996 and $3,000,000 in 1997 made evenly throughout each year. The consumer price index during 1995 remained constant at 100, and at the end of 1996 and 1997 it was 102 and 104, respectively. What should Chalk report as sales for 1997, restated for general price-level changes assuming that the year-end dollar is the constant dollar?
   a. $3,000,000.
   b. $3,029,126.
   c. $3,058,821.
   d. $3,120,000.

Items 5 and 6 are based on the following data:

Rice Wholesaling Corp. accounts for inventory on a FIFO basis. There were 8,000 units in inventory on January 1, 1993. Costs were incurred and goods purchased as follows during 1993:

   | Historical | Units | Units |
   |           | costs | purchased | sold |
   | 1993      |       |           |      |
   | 1st quarter | $410,000 | 7,000 | 7,500 |
   | 2nd quarter | 550,000 | 8,500 | 7,300 |
   | 3rd quarter | 425,000 | 6,500 | 8,200 |
   | 4th quarter | 630,000 | 9,000 | 7,000 |

   $2,015,000 | 31,000 | 30,000 |

Rice estimates that the current cost per unit of inventory was $57 at January 1, 1993, and $71 at December 31, 1993.

5. In Rice's voluntary supplementary information restated into current cost, the December 31, 1993, inventory should be reported at
   a. $576,000
   b. $585,000
   c. $630,000
   d. $639,000
6. In Rice's voluntary supplementary information restated into current cost, the cost of goods sold for 1993 would be
   a. $1,920,000
   b. $1,944,000
   c. $2,100,000
   d. $2,130,000

7. When does a general purchasing power loss occur, and when is it recognized?
   a. It occurs when holding net monetary assets during inflation and is recognized in constant dollar financial statements.
   b. It occurs when holding net monetary liabilities during inflation and is recognized in constant dollar financial statements.
   c. It occurs when holding net monetary assets during inflation and is recognized in nominal dollar financial statements and in constant dollar financial statements.
   d. It occurs when holding net monetary liabilities during inflation and is recognized in nominal dollar financial statements and in constant dollar financial statements.

8. Lewis Company was formed on January 1, 1996. Selected balances from the historical cost balance sheet at December 31, 1997, were as follows:

   Land (purchased in 1996) $120,000
   Investment in nonconvertible bonds (purchased in 1996, and expected to be held to maturity) 60,000
   Long-term debt 80,000

   The average Consumer Price Index was 100 for 1996, and 110 for 1997. In a supplementary constant dollar balance sheet (adjusted for changing prices) at December 31, 1997, these selected account balances should be shown at

<table>
<thead>
<tr>
<th></th>
<th>Land</th>
<th>Investment</th>
<th>Long-term debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>$120,000</td>
<td>$60,000</td>
<td>$88,000</td>
</tr>
<tr>
<td>b.</td>
<td>$120,000</td>
<td>$66,000</td>
<td>$88,000</td>
</tr>
<tr>
<td>c.</td>
<td>$132,000</td>
<td>$60,000</td>
<td>$80,000</td>
</tr>
<tr>
<td>d.</td>
<td>$132,000</td>
<td>$66,000</td>
<td>$80,000</td>
</tr>
</tbody>
</table>

9. When computing purchasing power gain or loss on net monetary items, which of the following accounts is classified as nonmonetary?
   a. Unamortized premium on bonds payable.
   b. Accumulated depreciation of equipment.
   c. Advances to unconsolidated subsidiaries.
   d. Allowance for uncollectible accounts.

10. The following information pertains to each unit of merchandise purchased for resale by Vend Co.:

    March 1, 1998
    | Purchase price | Selling price | Price level index |
    | $ 8           | $12          | 110               |

    December 31, 1998
    | Replacement cost | Selling price | Price level index |
    | $10             | $15          | 121               |

   Under current cost accounting, what is the amount of Vend’s holding gain on each unit of this merchandise?
   a. $0
   b. $0.80
   c. $1.20
   d. $2.00

11. Information with respect to Bruno Co.’s cost of goods sold for 1995 is as follows:

    | Historical |     |
    | Cost       | Units |
    | Inventory, 1/1/95 $1,060,000 | 20,000 |
    | Production during 1995 5,580,000 | 90,000 |
    | Inventory, 12/31/95 2,520,000 | 40,000 |
    | Cost of goods sold 4,120,000 | 70,000 |

   Bruno estimates that the current cost per unit of inventory was $58 at January 1, 1995, and $72 at December 31, 1995. In Bruno's supplementary information restated into average current cost, the cost of goods sold for 1995 should be
   a. $5,040,000
   b. $4,550,000
   c. $4,410,000
   d. $4,060,000
Items 12 and 13 are based on the following:
In a period of rising general price levels, Pollard Corp. discloses income on a current cost basis in accordance with FASB Statement No. 89, Financial Reporting and Changing Prices.

12. Compared to historical cost income from continuing operations, which of the following conditions increases Pollard’s current cost income from continuing operations?
   a. Current cost of equipment is greater than historical cost.
   b. Current cost of land is greater than historical cost.
   c. Current cost of cost of goods sold is less than historical cost.
   d. Ending net monetary assets are less than beginning net monetary assets.

13. Which of the following contributes to Pollard’s purchasing power loss on net monetary items?
   a. Refundable deposits with suppliers.
   b. Equity investment in unconsolidated subsidiaries.
   c. Warranty obligations.
   d. Wages payable.

14. On January 1, 1998, Nutley Corporation had monetary assets of $2,000,000 and monetary liabilities of $1,000,000. During 1998, Nutley's monetary inflows and outflows were relatively constant and equal so that it ended the year with net monetary assets of $1,000,000. Assume that the Consumer Price Index was 200 on January 1, 1998, and 220 on December 31, 1998. In end of year constant dollars, what is Nutley's purchasing power gain or loss on net monetary items for 1998?
   a. $0
   b. $50,000 gain
   c. $100,000 gain
   d. $100,000 loss

15. Details of Poe Corp.’s plant assets at December 31, 1993, are as follows:

<table>
<thead>
<tr>
<th>Year acquired</th>
<th>Percent depreciated</th>
<th>Historical cost</th>
<th>Estimated current cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>30</td>
<td>$200,000</td>
<td>$280,000</td>
</tr>
<tr>
<td>1992</td>
<td>20</td>
<td>60,000</td>
<td>76,000</td>
</tr>
<tr>
<td>1993</td>
<td>10</td>
<td>80,000</td>
<td>88,000</td>
</tr>
</tbody>
</table>

Poe calculates depreciation at 10% per annum, using the straight-line method. A full year's depreciation is charged in the year of acquisition. There were no disposals of plant assets. In Poe's voluntary supplementary information restated into current cost, the net current cost (after accumulated depreciation) of the plant assets at December 31, 1993, should be stated as
   a. $364,000
   b. $336,000
   c. $260,000
   d. $232,000

16. At both the beginning and end of the year, Lang Co.’s monetary assets exceeded monetary liabilities by $3,000,000. On January 1, the general price level was 125. On December 31, the general price level was 150. How much was Lang's purchasing power loss on net monetary items during the year?
   a. $0
   b. $600,000
   c. $750,000
   d. $1,125,000

17. Fair Value, Inc., paid $1,200,000 in December 1997 for certain of its inventory. In December 1998, one half of the inventory was sold for $1,000,000 when the replacement cost of the original inventory was $1,400,000. Ignoring income taxes, what amount should be shown as the total gain resulting from the above facts in a current value accounting income statement for 1998?
   a. $200,000.
   b. $300,000.
   c. $400,000.
   d. $500,000.

18. The following assets were among those that appeared on Baird Co.’s books at the end of the year:

<table>
<thead>
<tr>
<th>Asset</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand bank deposits</td>
<td>$650,000</td>
</tr>
<tr>
<td>Net long-term receivables</td>
<td>400,000</td>
</tr>
<tr>
<td>Patents and trademarks</td>
<td>150,000</td>
</tr>
</tbody>
</table>

In preparing constant dollar financial statements, how much should Baird classify as monetary assets?
   a. $1,200,000
   b. $1,050,000
   c. $800,000
   d. $650,000
19. When purchasing power gains or losses are computed, how is each of the following classified?

<table>
<thead>
<tr>
<th></th>
<th>Unamortized premium on bonds payable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patents</strong></td>
<td></td>
</tr>
<tr>
<td>a. Nonmonetary</td>
<td>Monetary</td>
</tr>
<tr>
<td>b. Nonmonetary</td>
<td>Nonmonetary</td>
</tr>
<tr>
<td>c. Monetary</td>
<td>Nonmonetary</td>
</tr>
<tr>
<td>d. Monetary</td>
<td>Monetary</td>
</tr>
</tbody>
</table>

20. During a period of inflation, the specific price of a parcel of land increased at a lower rate than the consumer price index. The accounting method that would measure the land at the highest amount is

a. Historical cost/nominal dollar.

b. Current cost/nominal dollar.

c. Current cost/constant dollar.

d. Historical cost/constant dollar.

21. Details of Weaver Corporation's fixed assets at December 31, 2000, are as follows:

<table>
<thead>
<tr>
<th>Year acquired</th>
<th>Percent depreciated</th>
<th>Historical cost</th>
<th>Estimated current cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>30</td>
<td>$100,000</td>
<td>$140,000</td>
</tr>
<tr>
<td>1999</td>
<td>20</td>
<td>30,000</td>
<td>38,000</td>
</tr>
<tr>
<td>2000</td>
<td>10</td>
<td>40,000</td>
<td>44,000</td>
</tr>
</tbody>
</table>

Weaver calculates depreciation at 10% per annum, using the straight-line method. A full year's depreciation is charged in the year of acquisition. There were no disposals of fixed assets. In Weaver's supplementary information restated into current cost, the net current cost (after accumulated depreciation) of the fixed assets should be stated as

a. $116,000.

b. $130,000.

c. $168,000.

d. $182,000.

22. Cartwright Corporation prepared the following data needed to compute the purchasing power gain or loss on net monetary items for inclusion in its supplementary information for the year ended December 31, 2000:

<table>
<thead>
<tr>
<th>Amount in nominal dollars</th>
<th>1997</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 31, 1999</td>
<td>$600,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>December 31, 2000</td>
<td>$1,566,000</td>
<td>$2,449,000</td>
</tr>
<tr>
<td>Net monetary liabilities</td>
<td>$966,000</td>
<td>$1,449,000</td>
</tr>
</tbody>
</table>

Assumed Consumer Price Index numbers:

- At December 31, 1999: 210
- At December 31, 2000: 230
- Average for 2000: 220

Cartwright's purchasing power gain or loss (expressed in average 2000 constant dollars) on net monetary items for the year ended December 31, 2000, should be

a. $109,000 gain.

b. $109,000 loss.

c. $111,000 gain.

d. $111,000 loss.

23. Kerr Company purchased a machine for $115,000 on January 1, 1992, the company's first day of operations. At the end of the year, the current cost of the machine was $125,000. The machine has no salvage value, a five-year life, and is depreciated by the straight line method. For the year ended December 31, 1992, the amount of the current cost depreciation expense which would appear in supplementary current cost financial statements is:

a. $14,000

b. $23,000

c. $24,000

d. $25,000

24. On December 30, 1996, Future, Incorporated, paid $2,000,000 for land. At December 31, 1997, the fair value of the land was $2,200,000. In January 1998, the land was sold for $2,250,000. **Ignoring income taxes**, by what amount should stockholders' equity be increased for 1997 and 1998 as a result of the above facts in current fair value financial statements?

<table>
<thead>
<tr>
<th>1997</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $0</td>
<td>$50,000</td>
</tr>
<tr>
<td>b. $0</td>
<td>$250,000</td>
</tr>
<tr>
<td>c. $200,000</td>
<td>$0</td>
</tr>
<tr>
<td>d. $200,000</td>
<td>$50,000</td>
</tr>
</tbody>
</table>

25. Manhof Co. prepares supplementary reports on income from continuing operations on a current cost basis in accordance with ASC 255, *Financial Reporting and Changing Prices*. How should Manhof compute cost of goods sold on a current cost basis?

a. Number of units sold times average current cost of units during the year.

b. Number of units sold times current cost of units at year end.

c. Number of units sold times current cost of units at the beginning of the year.

d. Beginning inventory at current cost plus cost of goods purchased less ending inventory at current cost.
26. The following items were among those that appeared on Rubi Co.'s books at the end of 1995:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchandise inventory</td>
<td>$600,000</td>
</tr>
<tr>
<td>Loans to employees</td>
<td>20,000</td>
</tr>
</tbody>
</table>

What amount should Rubi classify as monetary assets in preparing constant dollar financial statements?

a. $0
b. $20,000
c. $600,000
d. $620,000

27. Could current cost financial statements report holding gains for goods sold during the period and holding gains on inventory at the end of the period?

<table>
<thead>
<tr>
<th>Goods sold</th>
<th>Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

28. During a period of inflation in which a liability account balance remains constant, which of the following occurs?

a. A purchasing power loss if the item is a non-monetary liability.
b. A purchasing power gain if the item is a non-monetary liability.
c. A purchasing power loss if the item is a monetary liability.
d. A purchasing power gain if the item is a monetary liability.

29. Deecee Co. adjusted its historical cost income statement by applying specific price indexes to its depreciation expense and cost of goods sold. Deecee's adjusted income statement is prepared according to

a. Fair value accounting.
b. General purchasing power accounting.
d. Current cost/general purchasing power accounting.

30. During a period of inflation in which an asset account remains constant, which of the following occurs?

a. A purchasing power gain, if the item is a monetary asset.
b. A purchasing power gain, if the item is a nonmonetary asset.
c. A purchasing power loss, if the item is a monetary asset.
d. A purchasing power loss, if the item is a nonmonetary asset.

**FOREIGN EXCHANGE TRANSACTIONS**

31. A sale of goods was denominated in a currency other than the entity's functional currency. The sale resulted in a receivable that was fixed in terms of the amount of foreign currency that would be received. The exchange rate between the functional currency and the currency in which the transaction was denominated changed. The effect of the change should be included as a

a. Separate component of stockholders' equity whether the change results in a gain or a loss.
b. Separate component of stockholders' equity if the change results in a gain, and as a component of income if the change results in a loss.
c. Component of income if the change results in a gain, and as a separate component of stockholders' equity if the change results in a loss.
d. Component of income whether the change results in a gain or a loss.

32. On November 15, 1996, Celt, Inc., a U.S. company, ordered merchandise FOB shipping point from a German company for 200,000 marks. The merchandise was shipped and invoiced to Celt on December 10, 1996. Celt paid the invoice on January 10, 1997. The spot rates for marks on the respective dates are as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 15, 1996</td>
<td>.4955</td>
</tr>
<tr>
<td>December 10, 1996</td>
<td>.4875</td>
</tr>
<tr>
<td>December 31, 1996</td>
<td>.4675</td>
</tr>
<tr>
<td>January 10, 1997</td>
<td>.4475</td>
</tr>
</tbody>
</table>

In Celt's December 31, 1996, income statement, the foreign exchange gain is

a. $9,600
b. $8,000
c. $4,000
d. $1,600
33. Fogg Co., a U.S. company, contracted to purchase foreign goods. Payment in foreign currency was due one month after the goods were received at Fogg's warehouse. Between the receipt of goods and the time of payment, the exchange rates changed in Fogg's favor. The resulting gain should be included in Fogg's financial statements as a(n)
   a. Component of income from continuing operations.
   b. Extraordinary item.
   c. Deferred credit.
   d. Separate component of stockholders' equity.

34. On October 1, 1999, Mild Co., a U.S. company, purchased machinery from Grund, a German company, with payment due on April 1, 2000. If Mild's 1999 operating income included no foreign exchange transaction gain or loss, then the transaction could have
   a. Resulted in an extraordinary gain.
   b. Been denominated in U.S. dollars.
   c. Caused a foreign currency gain to be reported as a contra account against machinery.
   d. Caused a foreign currency translation gain to be reported as a separate component of stockholders' equity.

FORWARD CONTRACTS

Items 35 through 37 are based on the following:
On December 12, 1998, Imp Co. entered into three forward exchange contracts, each to purchase 100,000 francs in 90 days. The relevant exchange rates are as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Forward rate</th>
<th>Spot rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 12, 1998</td>
<td>$.88</td>
<td>$.90</td>
</tr>
<tr>
<td>December 31, 1998</td>
<td>.98</td>
<td>.93</td>
</tr>
</tbody>
</table>

35. Imp entered into the first forward contract to hedge a purchase of inventory in November 1998, payable in March 1999. At December 31, 1998, what amount of gain should Imp include in income from this forward contract?
   a. $0
   b. $3,000
   c. $5,000
   d. $10,000

36. Imp entered into the second forward contract to hedge a commitment to purchase equipment being manufactured to Imp’s specifications. At December 31, 1998, what amount of gain should Imp include in income from this forward contract?
   a. $0
   b. $3,000
   c. $5,000
   d. $10,000

37. Imp entered into the third forward contract for speculation. At December 31, 1998, what amount of gain should Imp include in income from this forward contract?
   a. $0
   b. $3,000
   c. $5,000
   d. $10,000

LOCAL CURRENCY = FUNCTIONAL CURRENCY

CURRENT RATE METHOD

38. Certain balance sheet accounts of a foreign subsidiary of Rowan, Inc., at December 31, 1996, have been translated into U.S. dollars as follows:

| Account              | Translated at | |
|----------------------|---------------|
|                      | Current rates | Historical rates |
| Note receivable,     | $240,000      | $200,000         |
| long-term            |               |                   |
| Prepaid rent         | 85,000        | 80,000           |
| Patent               | 150,000       | 170,000          |
|                      | $475,000      | $450,000         |

The subsidiary's functional currency is the currency of the country in which it is located. What total amount should be included in Rowan's December 31, 1996, consolidated balance sheet for the above accounts?
   a. $450,000
   b. $455,000
   c. $475,000
   d. $495,000
39. A subsidiary's functional currency is the local currency which has not experienced significant inflation. The appropriate exchange rate for translating the depreciation on plant assets in the income statement of the foreign subsidiary is the
a. Exit exchange rate.
b. Historical exchange rate.
c. Weighted average exchange rate over the economic life of each plant asset.
d. Weighted average exchange rate for the current year.

40. Certain balance sheet accounts of a foreign subsidiary of Post, Inc., at December 31, 1993, have been translated into U.S. dollars as follows:

<table>
<thead>
<tr>
<th></th>
<th>Translated at</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current rates</td>
</tr>
<tr>
<td>Accounts receivable,</td>
<td>$120,000</td>
</tr>
<tr>
<td>long-term</td>
<td></td>
</tr>
<tr>
<td>Prepaid Insurance</td>
<td>55,000</td>
</tr>
<tr>
<td>Copyright</td>
<td>75,000</td>
</tr>
<tr>
<td></td>
<td>$250,000</td>
</tr>
</tbody>
</table>

The subsidiary's functional currency is the currency of the country in which it is located. What total amount should be included in Post's December 31, 1993, consolidated balance sheet for the above accounts?

a. $225,000
b. $235,000
c. $240,000
d. $250,000

42. When remeasuring foreign currency financial statements into the functional currency, which of the following items would be remeasured using historical exchange rates?

a. Inventories carried at cost.
b. Marketable equity securities reported at market values.
c. Bonds payable.
d. Accrued liabilities.

43. Park Co.'s wholly-owned subsidiary, Schnell Corp., maintains its accounting records in German marks. Because all of Schnell's branch offices are in Switzerland, its functional currency is the Swiss franc. Remeasurement of Schnell's 2001 financial statements resulted in a $7,600 gain, and translation of its financial statements resulted in an $8,100 gain. What amount should Park report as a foreign exchange gain in its income statement for the year ended December 31, 2001?

a. $0
b. $7,600
c. $8,100
d. $15,700

44. Fay Corp. had a realized foreign exchange loss of $15,000 for the year ended December 31, 1996, and must also determine whether the following items will require year-end adjustment:

- Fay had an $8,000 loss resulting from the translation of the accounts of its wholly owned foreign subsidiary for the year ended December 31, 1996.
- Fay had an account payable to an unrelated foreign supplier payable in the supplier's local currency. The U.S. dollar equivalent of the payable was $64,000 on the October 31, 1996, invoice date, and it was $60,000 on December 31, 1996. The invoice is payable on January 30, 1997.

In Fay's 1996 consolidated income statement, what amount should be included as foreign exchange loss?

a. $11,000
b. $15,000
c. $19,000
d. $23,000

**FUNCTIONAL CURRENCY = NEITHER LOCAL NOR REPORTING CURRENCY**

43. Park Co.'s wholly-owned subsidiary, Schnell Corp., maintains its accounting records in German marks. Because all of Schnell's branch offices are in Switzerland, its functional currency is the Swiss franc. Remeasurement of Schnell's 2001 financial statements resulted in a $7,600 gain, and translation of its financial statements resulted in an $8,100 gain. What amount should Park report as a foreign exchange gain in its income statement for the year ended December 31, 2001?

a. $0
b. $7,600
c. $8,100
d. $15,700

**COMBINATION OF TRANSACTION AND TRANSLATION**

44. Fay Corp. had a realized foreign exchange loss of $15,000 for the year ended December 31, 1996, and must also determine whether the following items will require year-end adjustment:

- Fay had an $8,000 loss resulting from the translation of the accounts of its wholly owned foreign subsidiary for the year ended December 31, 1996.
- Fay had an account payable to an unrelated foreign supplier payable in the supplier's local currency. The U.S. dollar equivalent of the payable was $64,000 on the October 31, 1996, invoice date, and it was $60,000 on December 31, 1996. The invoice is payable on January 30, 1997.

In Fay's 1996 consolidated income statement, what amount should be included as foreign exchange loss?

a. $11,000
b. $15,000
c. $19,000
d. $23,000
REVIEW QUESTIONS

45. On September 22, 2001, Yumi Corp. purchased merchandise from an unaffiliated foreign company for 10,000 units of the foreign company’s local currency. On that date, the spot rate was $.55. Yumi paid the bill in full on March 20, 2002, when the spot rate was $.65. The spot rate was $.70 on December 31, 2001. What amount should Yumi report as a foreign currency transaction loss in its income statement for the year ended December 31, 2001?

a. $0
b. $500
c. $1,000
d. $1,500

46. On September 1, 1994, Bain Corp. received an order for equipment from a foreign customer for 300,000 local currency units (LCU) when the U.S. dollar equivalent was $96,000. Bain shipped the equipment on October 15, 1994, and billed the customer for 300,000 LCU when the U.S. dollar equivalent was $100,000. Bain received the customer’s remittance in full on November 16, 1994, and sold the 300,000 LCU for $105,000. In its income statement for the year ended December 31, 1994, Bain should report a foreign exchange gain of

a. $0
b. $4,000
c. $5,000
d. $9,000

47. On July 1, 1991, Clark Company borrowed 1,680,000 local currency units (LCU) from a foreign lender, evidenced by an interest bearing note due on July 1, 1992, which is denominated in the currency of the lender. The U.S. dollar equivalent of the note principal was as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/1/91 (date borrowed)</td>
<td>$210,000</td>
</tr>
<tr>
<td>12/31/91 (Clark’s year end)</td>
<td>$240,000</td>
</tr>
<tr>
<td>7/1/92 (date repaid)</td>
<td>$280,000</td>
</tr>
</tbody>
</table>

In its income statement for 1992, what amount should Clark include as a foreign exchange gain or loss?

a. $70,000 gain.
b. $70,000 loss.
c. $40,000 gain.
d. $40,000 loss.

48. Hunt Co. purchased merchandise for £300,000 from a vendor in London on November 30, 1999. Payment in British pounds was due on January 30, 2000. The exchange rates to purchase one pound were as follows:

<table>
<thead>
<tr>
<th>November 30</th>
<th>December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>1999</td>
</tr>
<tr>
<td>Spot-rate</td>
<td>$1.65</td>
</tr>
<tr>
<td>30-day rate</td>
<td>1.64</td>
</tr>
<tr>
<td>60-day rate</td>
<td>1.63</td>
</tr>
</tbody>
</table>

In its December 31, 1999, income statement, what amount should Hunt report as foreign exchange gain?

a. $12,000.
b. $9,000.
c. $6,000.
d. $0.

49. On September 1, 1999, Brady Corp. entered into a foreign exchange contract for speculative purposes by purchasing 50,000 deutsche marks for delivery in 60 days. The rates to exchange $1 for 1 deutsche mark follow:

<table>
<thead>
<tr>
<th>9/1/99</th>
<th>9/30/99</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spot rate</td>
<td>.75</td>
</tr>
<tr>
<td>30-day forward rate</td>
<td>.73</td>
</tr>
<tr>
<td>60-day forward rate</td>
<td>.74</td>
</tr>
</tbody>
</table>

In its September 30, 1999, income statement, what amount should Brady report as foreign exchange loss?

a. $2,500
b. $1,500
c. $1,000
d. $500

50. Shore Co. records its transactions in U.S. dollars. A sale of goods resulted in a receivable denominated in Japanese yen, and a purchase of goods resulted in a payable denominated in French francs. Shore recorded a foreign exchange gain on collection of the receivable and an exchange loss on settlement of the payable. The exchange rates are expressed as so many units of foreign currency to one dollar. Did the number of foreign currency units exchangeable for a dollar increase or decrease between the contract and settlement dates?

<table>
<thead>
<tr>
<th>Yen exchangeable for $1</th>
<th>Francs exchangeable for $1</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>b. Decrease</td>
<td>Decrease</td>
</tr>
<tr>
<td>c. Decrease</td>
<td>Increase</td>
</tr>
<tr>
<td>d. Increase</td>
<td>Decrease</td>
</tr>
</tbody>
</table>
51. A foreign subsidiary’s functional currency is its local currency, which has not experienced significant inflation. The weighted average exchange rate for the current year would be the appropriate exchange rate for translating

<table>
<thead>
<tr>
<th>Sales to customers</th>
<th>Wages expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

52. Ball Corp. had the following foreign currency transactions during 1996:

- Merchandise was purchased from a foreign supplier on January 20, 1996, for the U.S. dollar equivalent of $90,000. The invoice was paid on March 20, 1996, at the U.S. dollar equivalent of $96,000.
- On July 1, 1996, Ball borrowed the U.S. dollar equivalent of $500,000 evidenced by a note that was payable in the lender's local currency on July 1, 1998. On December 31, 1996, the U.S. dollar equivalents of the principal amount and accrued interest were $520,000 and $26,000, respectively. Interest on the note is 10% per annum.

In Ball's 1996 income statement, what amount should be included as foreign exchange loss?

a. $0  
b. $6,000  
c. $21,000  
d. $27,000

53. The functional currency of Nash, Inc.’s subsidiary is the French franc. Nash borrowed French francs as a partial hedge of its investment in the subsidiary. In preparing consolidated financial statements, Nash’s translation loss on its investment in the subsidiary exceeded its exchange gain on the borrowing. How should the effects of the loss and gain be reported in Nash’s consolidated financial statements?

a. The translation loss less the exchange gain is reported separately as other comprehensive income.
b. The translation loss less the exchange gain is reported in the income statement.
c. The translation loss is reported separately in the stockholders’ equity section of the balance sheet and the exchange gain is reported in the income statement.
d. The translation loss is reported in the income statement and the exchange gain is reported separately in the stockholders’ equity section of the balance sheet.

AUTHOR CONSTRUCTED QUESTION

54. A gain in the fair value of a derivative may be included in comprehensive income if the derivative is appropriately designated as a

a. Speculation in Foreign Currency.
b. Hedge of a Foreign Currency exposure of an available-for-sale security.
c. Hedge of a Foreign Currency exposure of a forecasted foreign currency denominated transaction.
d. Hedge of a foreign currency firm commitment.

RECENTLY RELEASED QUESTIONS

55. On November 2, 2001, Platt Co. entered into a 90-day futures contract to purchase 50,000 Swiss francs when the contract quote was $.70. The purchase was for speculation in price movement. The following exchange rates existed during the contract period:

<table>
<thead>
<tr>
<th>Date</th>
<th>30-day Futures</th>
<th>Spot Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 2, 2001</td>
<td>$.62</td>
<td>$.63</td>
</tr>
<tr>
<td>December 31, 2001</td>
<td>.65</td>
<td>.64</td>
</tr>
<tr>
<td>January 30, 2002</td>
<td>.65</td>
<td>.68</td>
</tr>
</tbody>
</table>

What amount should Platt report as foreign currency exchange loss in its income statement for the year ended December 31, 2001?

a. $2,500  
b. $3,000  
c. $3,500  
d. $4,000

56. In preparing consolidated financial statements of a U.S. parent company with a foreign subsidiary, the foreign subsidiary’s functional currency is the currency

a. In which the subsidiary maintains its accounting records.
b. Of the country in which the subsidiary is located.
c. Of the country in which the parent is located.
d. Of the environment in which the subsidiary primarily generates and expends cash.
57. Which of the following statements regarding foreign exchange gains and losses is correct?
   a. An exchange gain occurs when the exchange rate increases between the date a payable is recorded and the date of cash payment.
   b. An exchange gain occurs when the exchange rate increases between the date a receivable is recorded and the date of cash receipt.
   c. An exchange loss occurs when the exchange rate decreases between the date a payable is recorded and the date of the cash payment.
   d. An exchange loss occurs when the exchange rate increases between the date a receivable is recorded and the date of the cash receipt.

58. On October 1 of the current year, a U.S. company sold merchandise on account to a British company for 2,000 pounds (exchange rate, 1 pound = $1.43). At the company's December 31 fiscal year end, the exchange rate was 1 pound = $1.45. The exchange rate was 1 pound = $1.50 on collection in January of the subsequent year. What amount would the company recognize as a gain (loss) from foreign currency transaction when the receivable is collected?
   a. $0
   b. $100
   c. $140
   d. ($140)

59. A foreign subsidiary's functional currency is its local currency, which has not experienced significant inflation. The weighted average exchange rate for the current year would be the appropriate exchange rate for translating

<table>
<thead>
<tr>
<th>Salaries expense</th>
<th>Sales to external customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>
Chapter Six
Price Level—Foreign Exchange Problems

NUMBER 1

Skadden, Inc., a retailer, was organized during 1997. Skadden's management has decided to supplement its December 31, 2000 historical dollar financial statements with constant dollar financial statements using average-for-the-year dollars as the constant dollar. The following general ledger trial balance (historical dollar) and additional information have been furnished:

Skadden, Inc.
TRIAL BALANCE
December 31, 2000

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and receivables (net)</td>
<td>$ 540,000</td>
</tr>
<tr>
<td>Marketable securities (common stock)</td>
<td>400,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>440,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>650,000</td>
</tr>
<tr>
<td>Equipment—Accumulated depreciation</td>
<td>164,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>300,000</td>
</tr>
<tr>
<td>6% First mortgage bonds, due 2000</td>
<td>500,000</td>
</tr>
<tr>
<td>Common stock, $10 par</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Retained earnings, December 31, 1999</td>
<td>46,000</td>
</tr>
<tr>
<td>Sales</td>
<td>1,900,000</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>1,508,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>65,000</td>
</tr>
<tr>
<td>Other operating expenses and interest</td>
<td>215,000</td>
</tr>
<tr>
<td><strong>Total Debit</strong></td>
<td><strong>$3,864,000</strong></td>
</tr>
<tr>
<td><strong>Total Credit</strong></td>
<td><strong>$3,864,000</strong></td>
</tr>
</tbody>
</table>

1. Monetary assets (cash and receivables) exceeded monetary liabilities (accounts payable and bonds payable) by $445,000 at December 31, 1999. The amounts of monetary items are fixed in terms of numbers of dollars regardless of changes in specific prices or in the general price level.

2. Purchases ($1,840,000 in 2000) and sales are made uniformly throughout the year.

3. Depreciation is computed on a straight-line basis, with a full year's depreciation being taken in the year of acquisition and none in the year of retirement. The depreciation rate is 10 percent and no salvage value is anticipated. Acquisitions and retirements have been made fairly evenly over each year and the retirements in 2000 consisted of assets purchased during 1998 which were scrapped. An analysis of the equipment account reveals the following:

<table>
<thead>
<tr>
<th>Year</th>
<th>Balance</th>
<th>Additions</th>
<th>Retirements</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>—</td>
<td>$550,000</td>
<td>—</td>
<td>$550,000</td>
</tr>
<tr>
<td>1999</td>
<td>$550,000</td>
<td>10,000</td>
<td>—</td>
<td>560,000</td>
</tr>
<tr>
<td>2000</td>
<td>560,000</td>
<td>150,000</td>
<td>60,000</td>
<td>650,000</td>
</tr>
</tbody>
</table>

4. The bonds were issued in 1998 and the marketable securities were purchased fairly evenly over 2000. Other operating expenses and interest are assumed to be incurred evenly throughout the year.
5. Assume that Consumer Price Index was as follows:

<table>
<thead>
<tr>
<th>Annual Averages</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>113.9</td>
</tr>
<tr>
<td>1998</td>
<td>116.8</td>
</tr>
<tr>
<td>1999</td>
<td>121.8</td>
</tr>
<tr>
<td>1999 year-end</td>
<td>123.5</td>
</tr>
<tr>
<td>2000</td>
<td>126.7</td>
</tr>
<tr>
<td>2000 year-end</td>
<td>128.5</td>
</tr>
</tbody>
</table>

**Required:**

a. Prepare a schedule to convert the Equipment account balance at December 31, 2000 from historical cost to constant dollars assuming the constant dollar is the average-for-the-year dollar.

b. Prepare a schedule to analyze in historical dollars the Equipment—Accumulated Depreciation account for the year 2000.

c. Prepare a schedule to analyze in constant dollars the Equipment—Accumulated Depreciation account for the year 2000.

d. Prepare a schedule to compute Skadden, Inc.'s purchasing power gain or loss on its net holdings of monetary assets for 2000 (ignore income tax implications). The schedule should give consideration to appropriate items on or related to the balance sheet and the income statement.

**NUMBER 2**

Barden Corp., a manufacturer with large investments in plant and equipment, began operations in 1965. The company's history has been one of expansion in sales, production, and physical facilities. Recently, some concern has been expressed that the conventional financial statements do not provide sufficient information for decisions by investors. After consideration of proposals for various types of supplementary financial statements to be included in the 1999 annual report, management has decided to present a balance sheet as of December 31, 1999, and a statement of income and retained earnings for 1999, both restated for changes in the general price level.

**Required:**

a. On what basis can it be contended that Barden's conventional statements should be restated for changes in the general price level?

b. Distinguish between financial statements restated for general price-level changes and current-value financial statements.

c. Distinguish between monetary and nonmonetary assets and liabilities, as the terms are used in general price-level accounting. Give examples of each.

d. Outline the procedures Barden should follow in preparing the proposed supplementary statements.

e. Indicate the major similarities and differences between the proposed supplementary statements and the corresponding conventional statements.

f. Assuming that in the future Barden will want to present comparative supplementary statements, can the 1999 supplementary statements be presented in 2000 without adjustments? Explain.
NUMBER 3

Dhia Products Company was incorporated in the State of Florida in 1967 to do business as a manufacturer of medical supplies and equipment. Since incorporating, Dhia has doubled the size about every three years and is now considered one of the leading medical supply companies in the country.

During January 1996, Dhia established a subsidiary, Ban, Ltd., in the emerging nation of Shatha. Dhia owns 90% of the outstanding capital stock of Ban; the remaining 10% of Ban's outstanding capital stock is held by Shatha citizens, as required by Shatha constitutional law. The investment in Ban, accounted for by Dhia by the equity method, represents about 18% of the total assets of Dhia at December 31, 1999, the close of the accounting period for both companies.

Required:
Assume it has been appropriate for Dhia and Ban to prepare consolidated financial statements for each year 1996 through 1999 with the U.S. dollar being the functional currency. But before consolidated financial statements can be prepared, the individual account balances in Ban's December 31, 1999, adjusted trial balance must be translated into the appropriate number of United States dollars. For each of the ten (10) accounts listed below, taken from Ban's adjusted trial balance, specify what exchange rate (for example, average exchange rate for 1999, current exchange rate at December 31, 1999, etc.) should be used to translate the account balances into dollars and explain why that rate is appropriate. Number your answers to correspond with each account listed below.

2. Trade accounts receivable (all from 1999 revenues).
3. Supplies inventory (all purchased during the last quarter of 1999).
4. Land (purchased in 1996).
6. Capital stock (no par or stated value and all issued in January 1996).
8. Sales revenue.
10. Salaries expense.

NUMBER 4

On January 1, 1998, the Franklin Company formed a foreign subsidiary which issued all of its currently outstanding common stock on that date. Selected captions from the balance sheets, all of which are shown in local currency units (LCU), are as follows:

<table>
<thead>
<tr>
<th>December 31</th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable (net of allowance for uncollectible accounts of 2,200 LCU at December 31, 1999 and 2,000 LCU at December 31, 1998)</td>
<td>40,000 LCU</td>
<td>35,000 LCU</td>
</tr>
<tr>
<td>Inventories, at cost</td>
<td>80,000 LCU</td>
<td>75,000 LCU</td>
</tr>
<tr>
<td>Property, plant and equipment (net of allowance for accumulated depreciation of 31,000 LCU at December 31, 1999 and 14,000 LCU at December 31, 1998)</td>
<td>163,000 LCU</td>
<td>150,000 LCU</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>100,000 LCU</td>
<td>120,000 LCU</td>
</tr>
<tr>
<td>Common stock, authorized 10,000 shares, par value 10 LCU per share, issued and outstanding 5,000 shares at December 31, 1999 and December 31, 1998</td>
<td>50,000 LCU</td>
<td>50,000 LCU</td>
</tr>
</tbody>
</table>
Additional information is as follows:

- Exchange rates are as follows:
  - January 1, 1998 - July 31, 1998  2 LCU to $1
  - August 1, 1998 - October 31, 1998  1.8 LCU to $1
  - November 1, 1998 - June 30, 1999  1.7 LCU to $1
  - July 1, 1999 - December 31, 1999  1.5 LCU to $1
  - Average monthly rate for 1998  1.9 LCU to $1
  - Average monthly rate for 1999  1.6 LCU to $1

- An analysis of the accounts receivable balance is as follows:

<table>
<thead>
<tr>
<th>Accounts receivable:</th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at beginning of year</td>
<td>37,000 LCU</td>
<td>— LCU</td>
</tr>
<tr>
<td>Sales (36,000 LCU per month in 1999 and 31,000 LCU per month in 1998)</td>
<td>432,000</td>
<td>372,000</td>
</tr>
<tr>
<td>Collections</td>
<td>423,600</td>
<td>334,000</td>
</tr>
<tr>
<td>Write-offs (May 1999 and December 1998)</td>
<td>3,200</td>
<td>1,000</td>
</tr>
<tr>
<td>Balance at end of year</td>
<td>42,200 LCU</td>
<td>37,000 LCU</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Allowance for uncollectible accounts:</th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at beginning of year</td>
<td>2,000 LCU</td>
<td>— LCU</td>
</tr>
<tr>
<td>Provision for uncollectible accounts</td>
<td>3,400</td>
<td>3,000</td>
</tr>
<tr>
<td>Write-offs (May 1999 and December 1998)</td>
<td>3,200</td>
<td>1,000</td>
</tr>
<tr>
<td>Balance at end of year</td>
<td>2,200 LCU</td>
<td>2,000 LCU</td>
</tr>
</tbody>
</table>

- An analysis of inventories, for which the first-in, first-out (FIFO) inventory method is used, is as follows:

<table>
<thead>
<tr>
<th>Inventory at beginning of year</th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases (June 1999 and June 1998)</td>
<td>335,000</td>
<td>375,000</td>
</tr>
<tr>
<td>Goods available for sale</td>
<td>410,000</td>
<td>375,000</td>
</tr>
<tr>
<td>Inventory at end of year</td>
<td>80,000</td>
<td>75,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>330,000 LCU</td>
<td>300,000 LCU</td>
</tr>
</tbody>
</table>

- On January 1, 1998, Franklin's foreign subsidiary purchased land for 24,000 LCU and plant and equipment for 140,000 LCU. On July 4, 1999, additional equipment was purchased for 30,000 LCU. Plant and equipment is being depreciated on a straight-line basis over a ten-year period with no salvage value. A full year's depreciation is taken in the year of purchase.

- On January 15, 1998, 7% bonds with a face value of 120,000 LCU were sold. These bonds mature on January 15, 2004, and interest is paid semiannually on July 15 and January 15. The first payment was made on January 15, 1999.

**Required:**
Prepare a schedule translating the selected captions above into United States dollars at December 31, 1999, and December 31, 1998, respectively. Show supporting computations in good form and assume that the U.S. dollar is the functional currency.
Number 5

Jay Co.'s 1999 consolidated financial statements include two wholly owned subsidiaries, Jay Co. of Australia (Jay A) and Jay Co. of France (Jay F). Functional currencies are the US dollar for Jay A and the franc for Jay F.

Required:

a. What are the objectives of translating a foreign subsidiary's financial statements?
b. How are gains and losses arising from translating or remeasuring of each subsidiary's financial statements measured and reported in Jay's consolidated financial statements?
c. ASC 255 identifies several economic indicators that are to be considered both individually and collectively in determining the functional currency for a consolidated subsidiary. List three of those indicators.
d. What exchange rate is used to incorporate each subsidiary's equipment cost, accumulated depreciation, and depreciation expense in Jay's consolidated financial statements?
Chapter Six
Solutions to Price Level—Foreign Exchange Questions

1. (c) Selling price of land $400,000
   Less: Cost of land adjusted for price
   level changes to Dec. 1999 $300,000 × 140 ÷ 120 350,000
   Gain on sale $ 50,000

2. (d) Cost of equipment $300,000
   Less: Accumulated depreciation ($300,000 ÷ 10 × 4 yrs.) 120,000
   Book value $180,000
   Selling price of equipment $200,000
   Less: Book value of equipment adjusted for
   price level changes from 1/1/96 to 12/31/99
   $180,000 × 140 ÷ 100 252,000
   Loss on sale of equipment $(52,000)

3. (a) FASB #89 suggests that inventory and property, plant and equipment be reported at both current cost (current cost — nominal dollars) and current cost adjusted for the change in price level (current cost — constant dollars). The difference between current cost — nominal dollars ($15,000) and current cost — constant dollars ($12,000) is attributable to inflation ($3,000).

4. (b) Sales are evenly distributed throughout the year and are restated to year-end dollars. Indices of prior year do not affect the computation.
   Year end index 104 × 3,000,000 = $3,029,126
   Avg. index for year 103

5. (d) Current cost per unit—$71 × 9,000 = $639,000

6. (a) Average current cost of units
   ($57 + $71 = $128 ÷ 2) = $ 64
   Number of units sold × 30,000
   Cost of goods sold (current cost) $1,920,000

7. (a) General purchasing power losses occur when net monetary assets are held during a period of inflation. This is because the monetary assets are fixed in terms of dollars and the value of the dollar is decreasing. Conversely, a gain occurs if net monetary liabilities are held during inflation. General purchasing power gains and losses are recognized only in constant dollar (units-of-general-purchasing-power) financial statements.

8. (c) Since the investment and the liability are monetary items, they are reported at their unadjusted balance. The land is adjusted as follows: $120,000 × 110 ÷ 100 = $132,000.

9. (b) The only answer which is not fixed in terms of dollars (or related to an account which is fixed) is the accumulated depreciation of equipment.

10. (d) Holding gains for inventory are measured by comparing current value (replacement cost) at year-end to book value (purchase price). Therefore, the holding gain is $2.00 ($10.00 – $8.00).

11. (b) Average current unit cost of merchandise $ 65
   Number of units sold × 70,000
   Cost of goods sold (average current cost) $4,550,000
12. (c) Holding gains for equipment (a) and land (b) are not part of income from continuing operations. The reduction in cost of goods sold is reflected in income from continuing operations (c) and (d) is not applicable for current cost measurement.

13. (a) The purchasing power loss is recognized from holding monetary assets during a period of rising prices. The only monetary asset listed is the refundable deposits. Items (c) and (d) are liabilities, and (b) is a non monetary asset.

14. (d)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net monetary assets 1/1/98</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Converted to 12/31/98 $</td>
<td></td>
</tr>
<tr>
<td>$1,000,000 × 220/200</td>
<td>$1,100,000</td>
</tr>
<tr>
<td>Net monetary assets at 12/31/98</td>
<td>- 1,000,000</td>
</tr>
<tr>
<td>Purchasing power loss</td>
<td>$ 100,000</td>
</tr>
</tbody>
</table>

15. (b) Current cost of plant assets $444,000
   Accumulated depreciation:
   
<table>
<thead>
<tr>
<th>Year</th>
<th>Cost</th>
<th>Depreciation %</th>
<th>Depreciation Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991 asset</td>
<td>$280,000</td>
<td>30%</td>
<td>$84,000</td>
</tr>
<tr>
<td>1992 asset</td>
<td>76,000</td>
<td>20%</td>
<td>15,200</td>
</tr>
<tr>
<td>1993 asset</td>
<td>88,000</td>
<td>10%</td>
<td>8,800</td>
</tr>
<tr>
<td>Total</td>
<td>108,000</td>
<td></td>
<td>108,000</td>
</tr>
</tbody>
</table>

   Net current cost $336,000

16. (b) Purchasing power loss = 150 ÷ 125 × $3,000,000 = $600,000

17. (d) $500,000.
   Gain from sale of one-half of inventory: 1,000,000 – (1/2 × 1,200,000) = 400,000
   Holding gain from one-half not sold:
   
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>600,000</td>
</tr>
<tr>
<td>Replacement value</td>
<td>700,000</td>
</tr>
<tr>
<td>Holding gain</td>
<td>100,000</td>
</tr>
<tr>
<td>Total gain</td>
<td>500,000</td>
</tr>
</tbody>
</table>

18. (b) Only the deposit and receivables are cash or fixed amounts to be received or paid in the future.

19. (a) A patent is not a fixed or determinable sum of money and is therefore nonmonetary. Premium on bonds payable is directly related to a liability account which is fixed in terms of dollars and is therefore monetary.

20. (d) Since the inflation rate was higher than the rate of increase in the specific value of the land, current cost should not be used, only constant dollar (at historical cost) which would generate the highest amount.

21. (c)

<table>
<thead>
<tr>
<th>Current Cost</th>
<th>% depreciated</th>
</tr>
</thead>
<tbody>
<tr>
<td>$140,000</td>
<td>30% = $ 42,000</td>
</tr>
<tr>
<td>38,000</td>
<td>20% = 7,600</td>
</tr>
<tr>
<td>44,000</td>
<td>10% = 4,400</td>
</tr>
</tbody>
</table>

Accumulated depreciation $ 54,000
Current value of assets $222,000
Net current cost $168,000

22. (a) Net liabilities, December 31, 2000 $1,449,000
   Net liabilities, December 31, 1999
   \[
   \frac{966,000 \times 220 + 210}{483,000 \times 220 + 220} = \frac{1,012,000}{483,000} = 483,000
   \]
   Net monetary liabilities restated to 2000 average $1,495,000
   Compared to 2000 actual restated $1,449,000 × 220 ÷ 230 = $ 1,386,000
   $ 109,000

6S-2
23. (c) Assuming that average current cost was used, the average current cost of the machine is $120,000 for 1992, which would generate depreciation expense of $24,000 (5 year life).

24. (d) Stockholders' equity in current value statements would increase by $200,000 in 1997, being the difference between the cost at 12/30/96 and the fair value at 12/31/97. The additional $50,000 would be part of the profit realized in 1998 on the sale. Answer choice (b) is correct for conventional statements under GAAP, but not for current value statements.

25. (a) According to ASC 255, cost of goods sold should be measured by using the current cost at the date of sale. Since Manhof incurs sales throughout the year, cost of goods sold should be calculated by using the number of units sold multiplied by the average current cost per unit during the year.

26. (b) Monetary assets are those which are fixed in terms of settlement amounts, i.e., normally cash, receivables and payables. Therefore, only the loans to employees would be a monetary asset.

27. (a) Cost of goods sold is recorded at the current cost of the merchandise at the time of sale. Therefore, a holding gain would be recorded for merchandise sold during the year as well as for merchandise in inventory at the end of the year.

28. (d) If a monetary liability is held constant during a period of inflation, a purchasing power gain would result. If accounts payable were held constant at $10,000 when the index increased from 110 to 120, a purchasing power gain of $872 would result as follows:

\[
\begin{align*}
\text{Beginning of year} & \quad \$10,000 \times \frac{115}{110} \quad \text{(average)} = \$10,455 \\
\text{End of year} & \quad \$10,000 \times \frac{115}{120} = \frac{9,583}{\text{(end)}} \\
\text{Purchasing power gain} & \quad \$872 \quad \text{(decrease in liability)}
\end{align*}
\]

29. (c) ASC 255 suggest that income from operations be reported on a current cost basis. The adjustment of depreciation expense and cost of goods sold to a current cost basis may be made by using current cost, exit value, capitalization of net cash flows, or by applying specific indexes to the historical cost. Specific price indexes are indexes compiled specifically for inventory or for plant and equipment. Specific indexes should not be confused with a general index such as the CPI-Urban which is normally used to adjust historical cost for the change in price level. Answer (a) is incorrect because current cost of goods would not be the same as fair value (selling price). Answers (b) and (d) are incorrect because both deal with the calculation of purchasing power.

30. (c) A monetary asset held during a period of inflation will lose its purchasing power. For example, a company holding cash during 2001 when the inflation rate was 3% would be able to purchase 3% less at the end of the year compared to the purchasing power of the cash at the beginning of the year.

31. (d) A recognized gain or loss results from settling a receivable or payable which is denominated in other than the company's primary (functional) currency. If the receivable or payable has not been settled, a gain or loss is recognized if the exchange rate changes from the prior date of measurement.

32. (c) Amount recorded in accounts payable by Celt, Inc.

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 10, 1996 (.4875); recorded on date of invoice</td>
<td>$97,500</td>
<td></td>
</tr>
<tr>
<td>Balance due Dec. 31, 1996 (.4675)</td>
<td>$93,500</td>
<td></td>
</tr>
<tr>
<td>Gain reported 12/31/96</td>
<td>$ 4,000</td>
<td></td>
</tr>
</tbody>
</table>

33. (a) Gains or losses on foreign exchange transactions are always shown as a component of income from continuing operations.
34. (b) Denominated means that the liability is fixed in terms of the amount of currency in which it will be paid. If the liability is fixed in the amount of U.S. dollars to be paid, fluctuations in the German currency would not affect the amount to be paid and a foreign currency transaction gain or loss would not occur. Answer (a) is incorrect because transaction gains or losses are not extraordinary. Answers (c) and (d) are incorrect because transaction gains or losses are a part of income from continuing operations.

35. (b) ASC 814 states that the change in the forward rate should be the basis for the calculation of the gain on the forward contract. The change in the forward rate is from $.90 to $.93 or $.03 x 100,000 francs = $3,000.

36. (b) ASC 814 states that the change in the forward rate should be the basis for the calculation of the gain on the forward contract. The change in the forward rate is from $.90 to $.93 or $.03 x 100,000 francs = $3,000.

37. (b) ASC 814 states that the change in the forward rate should be the basis for the calculation of the gain on the forward contract. The change in the forward rate is from $.90 to $.93 or $.03 x 100,000 francs = $3,000.

38. (c) Since the functional currency is the foreign currency, the accounts are not remeasured and the current rate is used for translation.

39. (d) Income and expense items are generally translated using the weighted average exchange rate for the year when the functional currency is the foreign currency.

40. (d) Since the functional currency of the foreign subsidiary is the foreign currency, all assets are translated into U.S. dollars using the current rate method.

41. (d) Since the subsidiary's functional currency is the parent's currency, the gains are reported as income similar to transaction gains.

42. (a) Under the remeasurement method, nonmonetary items such as inventories or property, plant and equipment would be remeasured using historical exchange rates. Monetary items such as marketable equity securities reported at market value, bonds payable or accrued liabilities would be remeasured using the current exchange rates.

43. (b) This is the exception to the general rules for consolidating foreign subsidiaries. In this case, neither the local currency (German marks) nor the reporting currency (US dollars) is the functional currency. Since the functional currency is the Swiss franc, the financial statements of the subsidiary must first be remeasured from German marks into Swiss francs and a foreign exchange remeasurement gain of $7,600 must be recognized.

The remeasured financial statements are then translated into US dollars and a foreign exchange translation gain of $8,100 is calculated. The consolidated financial statements would then report a foreign exchange remeasurement gain of $7,600 on the Income Statement and the $8,100 translation gain would be reported as a part of other comprehensive income.

44. (a) 1996 foreign exchange loss
Less exchange gain from accounts payable transaction  $15,000
Reported foreign exchange loss  $11,000

45. (d) Amount recorded in Accounts Payable on the date of purchase - September 22, 2001 10,000 units × $.55 = $5,500
Amount Due on Accounts Payable at December 31, 2001 10,000 units × $.70 = 7,000
Foreign exchange translation loss - 2001 $1,500

46. (c) The sale was recorded when the dollar equivalent for the LCU's was $100,000 and the receivable was settled for $105,000 within the year. Therefore, there is a resulting $5,000 gain recognized.
47. (d) The note would have been adjusted at 12/31/91 to the equivalent of $240,000. Therefore, in 1992, the difference between the repayment equivalent of $280,000 and $40,000 would be recognized as a loss.

48. (b) An adjustment is required at December 31 to properly state Hunt Co.'s liability for the fluctuations in the spot rate. The original purchase was recorded on November 30 at the spot rate of $495,000 (300,000 pounds × $1.65). Since the exchange rate decreased by $.03 on December 31, the following adjusting journal entry should be made:

<table>
<thead>
<tr>
<th>Accounts Payable</th>
<th>9,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain on Foreign Currency Transaction</td>
<td>9,000</td>
</tr>
</tbody>
</table>

Calculation: 300,000 pounds × $.03 = $9,000

Note: The 30-day and 60-day rates would be used for fluctuations in forward exchange contracts.

49. (c) The key points are to use forward rates for a speculative contract and to use the forward rate at September 30 for the remaining maturity (30 days) of the forward contract. The loss is 50,000 × ($.72 – .74) = $1,000.

50. (b) A gain on settlement of the receivable and a loss on the settlement of payable means that the amount of dollars received and paid at settlement were greater than the amount at the contract date.

Example: LCU 10,000 at exchange rate of 5 LCU for $1 = $20,000.

In order for the settlement amount to be greater than $20,000, the LCU’s per $1 must decrease; i.e., LCU 100,000 ÷ 4 LCU = $25,000.

51. (b) Since sales and wages expense are incurred throughout the year, the weighted average current rate is used as the exchange rate.

52. (d) Transaction loss, $96,000 - $90,000 $ 6,000

<table>
<thead>
<tr>
<th>Loan balance as recorded 7/1/96</th>
<th>$500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued interest (half year at 10%)</td>
<td>25,000</td>
</tr>
<tr>
<td>Recorded balance of loan and interest at 12/31/96</td>
<td>$525,000</td>
</tr>
<tr>
<td>Translated balance</td>
<td>$46,000</td>
</tr>
<tr>
<td>Exchange loss</td>
<td>21,000</td>
</tr>
<tr>
<td>Total foreign exchange loss</td>
<td>$27,000</td>
</tr>
</tbody>
</table>

53. (a) Gains and losses on foreign currency transactions that are designated as economic hedges of a net investment in a foreign entity should be reported in the same manner as a translation adjustment. Current changes in translation adjustments are reported as other comprehensive income.

54. (c) ASC 815 requires that gains or losses on a derivative used as a hedge of a forecasted foreign-currency-denominated transaction should be included in comprehensive income because the transaction is not complete. When the transaction is complete, the gain will be reclassified from comprehensive income to current earnings.

55. (a) The key point is that the purchase was for speculation in price movement. In a purchase of a futures contract for speculation, the difference between the contract rate ($.70) and the 30-day futures rate at December 31, 2001 ($.65) of $.05 x 50,000 Swiss francs purchased equals the $2,500 foreign currency exchange loss that appears on the income statement.

56. (d) ASC 815 states that an entity’s functional currency is the currency of the primary economic environment in which the entity operates; normally, that is the currency of the environment in which an entity primarily generates and expends cash.
57. (b) An exchange gain occurs when the exchange rate increases between the date a receivable is recorded and the date of the receipt. For example, assume that XYZ Company recorded a receivable of 100,000 Euros when the exchange rate was .92 for a total of $92,000. If the exchange rate increases to .94, the receivable would now be worth $94,000 for an exchange gain of $2000.

Answer (d) is incorrect because it states that an exchange loss would occur. Answers (a) and (c) are wrong because they are backwards. For example, assume that XYZ Company had a payable of $100,000 Euros and recorded the payable at $92,000 when the exchange rate was .92. If the exchange rate increased to .94, the payable would increase to $94,000 for an exchange loss of $2,000.

58. (b) The value of the receivable on October 1 of the current year was $2,860 (2000 pounds x the exchange rate of $1.43). On December 31 the value of the receivable had increased to $2900 (2000 pounds x exchange rate $1.45) and a foreign currency transaction gain of $40 was recognized. When the receivable was collected in the subsequent year the value of the receivable has increased to $3,000 (2,000 pounds x the exchange rate of $1.50) and a foreign currency transaction gain of $100 recognized (value of receivable on December 31 of $2900 vs. $3,000 value in January of subsequent year).

59. (a) If a foreign subsidiary's functional currency is the local currency, which has not experienced significant inflation, the subsidiary is translated using the current rate method. The current rate method requires that the weighted average exchange rate for the current year be used to translate all income statement items.
Chapter Six
Solutions to Price Level—Foreign Exchange Problems

NUMBER 1

a.

Skadden, Inc.
SCHEDULE TO ANALYZE EQUIPMENT FOR CONSTANT DOLLAR RESTATEMENT
December 31, 2000

<table>
<thead>
<tr>
<th>Year Acquired</th>
<th>Amount (Historical)</th>
<th>Conversion Factor</th>
<th>Constant Dollar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$490,000</td>
<td>1.085 (126.7/116.8)</td>
<td>$531,650</td>
</tr>
<tr>
<td>1999</td>
<td>10,000</td>
<td>1.040 (126.7/121.8)</td>
<td>10,400</td>
</tr>
<tr>
<td>2000</td>
<td>150,000</td>
<td>1.000</td>
<td>150,000</td>
</tr>
<tr>
<td></td>
<td>$650,000</td>
<td></td>
<td>$692,050</td>
</tr>
</tbody>
</table>

b.

Skadden, Inc.
SCHEDULE TO ANALYZE EQUIPMENT--ACCUMULATED DEPRECIATION
(Historical Dollars) For the Year 2000

<table>
<thead>
<tr>
<th>Year Acquired</th>
<th>Amount (Historical)</th>
<th>%</th>
<th>Depreciated</th>
<th>Balance 12/31/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$490,000</td>
<td>3/10</td>
<td>$147,000</td>
<td>$147,000</td>
</tr>
<tr>
<td>1999</td>
<td>10,000</td>
<td>2/10</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>2000</td>
<td>150,000</td>
<td>1/10</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>$650,000</td>
<td></td>
<td></td>
<td>$164,000</td>
</tr>
</tbody>
</table>

c.

Skadden, Inc.
SCHEDULE TO ANALYZE EQUIPMENT--ACCUMULATED DEPRECIATION
(Constant Dollars) For the Year 2000

<table>
<thead>
<tr>
<th>Year Acquired</th>
<th>Accumulated Depreciation Balance 12/31/93</th>
<th>Conversion Factor</th>
<th>Constant Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$147,000</td>
<td>1.085</td>
<td>$159,495</td>
</tr>
<tr>
<td>1999</td>
<td>2,000</td>
<td>1.040</td>
<td>2,080</td>
</tr>
<tr>
<td>2000</td>
<td>15,000</td>
<td>1.000</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>$164,000</td>
<td></td>
<td>$176,575</td>
</tr>
</tbody>
</table>

d.

Skadden, Inc.
SCHEDULE TO COMPUTE PURCHASING POWER GAIN OR LOSS FOR 2000

<table>
<thead>
<tr>
<th></th>
<th>12/31/99 Restated to Historical</th>
<th>12/31/00 Historical (restated in Average 1993 $’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical Factor</td>
<td>Average 1993 $’s</td>
<td></td>
</tr>
<tr>
<td>Cash &amp; receivables</td>
<td>$540,000</td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>(300,000)</td>
<td></td>
</tr>
<tr>
<td>Bonds payable</td>
<td>(500,000)</td>
<td></td>
</tr>
<tr>
<td>Net</td>
<td>$ 445,000</td>
<td>$462,800</td>
</tr>
</tbody>
</table>

6S-7
Purchasing power gain or loss

<table>
<thead>
<tr>
<th>Description</th>
<th>12/31/99</th>
<th>1.026 (126.7 ÷ 123.5)</th>
<th>12/31/00 (as above)</th>
<th>.986 (126.7 ÷ 128.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net monetary items--</td>
<td>$ 445,000</td>
<td>126,700</td>
<td>$ 260,000</td>
<td>126,430</td>
</tr>
<tr>
<td>Add: Sales</td>
<td>1,900,000</td>
<td>1,900,000</td>
<td>1,900,000</td>
<td>1,900,000</td>
</tr>
<tr>
<td></td>
<td>2,345,000</td>
<td>2,356,570</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deduct:</td>
<td>1,840,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses and interest</td>
<td>215,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase of marketable securities</td>
<td>400,000</td>
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<td></td>
</tr>
<tr>
<td>Acquisitions of equipment</td>
<td>150,000</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>2,605,000</td>
<td>2,605,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net monetary items--</td>
<td>$(260,000)</td>
<td>$(260,000)</td>
<td></td>
<td>$(7,930)</td>
</tr>
<tr>
<td>historical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net monetary items--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>historical--restated--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/31/00</td>
<td>(248,430)</td>
<td>(248,430)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net monetary items--</td>
<td>$260,000</td>
<td>$260,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/31/00 (as above)</td>
<td>.986 (126.7 ÷ 128.5)</td>
<td>.986 (126.7 ÷ 128.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing power loss</td>
<td>$(7,930)</td>
<td>$(7,930)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NUMBER 2**

a. In general, conventional financial statements reflect transactions in terms of the number of dollars originally involved in those transactions. If prices did not change (i.e., if the dollar were a stable unit of measure), such statements would automatically reflect all transactions in terms of dollars of equal purchasing power. Prices, however, do change, and the effects of the changes are not isolated in conventional statements.

Barden has operated through a period of substantial price changes. Its conventional statements, therefore, simply present combinations of numbers of dollars of varying purchasing power. Such combinations are meaningless if an investor wishes to evaluate the performance of Barden's management over a long period of time to compare Barden to other companies (which present other meaningless combinations). After restatement for general price-level changes, Barden's statements will reflect its transactions in terms of a single unit of measure—the general purchasing power of the dollar at a specified date.

b. Financial statements restated for general price-level changes are based on conventional statements. The historical amounts are restated in terms of the general purchasing power of the dollar at the date of the latest balance sheet presented, as measured by an index based on the price changes of a broad group of goods and services. (Such an index for the United States is the Gross National Product Implicit Price Deflator.) Such statements indicate a company's gain or loss of general purchasing power (general price-level gain or loss). Since the prices of specific items do not necessarily change at the same rate as the general price level, such statements do not purport to show the current values of balance-sheet items or the prices at which transactions would take place currently.

Current-value statements purport to show the current values of individual balance-sheet items and the effects of changes in such values on the results of operations. Many different means of determining current values have been proposed, including replacement costs, resale price, appraisal value, and use of specific (rather than general) price indices. It is sometimes proposed that the portion of the change in value relating to inflation or deflation (change in the general price level) be shown separately from the remaining portion of the change.
c. Monetary assets and liabilities are those for which the amounts in terms of numbers of dollars are fixed (by contract or otherwise) regardless of general price-level changes. Other assets and liabilities are classified as nonmonetary. Examples of monetary items include cash and the usual types of accounts and notes receivable and accounts and notes payable. Examples of nonmonetary items include most inventories, plant and equipment, and liabilities for advances received on sales contracts.

The classification of some items may depend on the purpose for which the company holds them. For example, bonds held for the fixed principal and interest are monetary; bonds held for price speculation are nonmonetary.

d. To prepare the proposed supplementary statements, Barden should:
1. Classify assets and liabilities (at both December 31, 1998, and December 31, 1999) as monetary or nonmonetary.
2. Analyze the nonmonetary balance-sheet items to determine the time of origin.
3. Analyze all 1999 income-statement items and other 1999 items (including dividends) affecting retained earnings to determine the time of origin.
4. Restate the items analyzed in steps 2 and 3 above in terms of December 31, 1999, general purchasing power. This is accomplished by multiplying each historical amount by a "conversion factor" (the ratio of the current index number to the index number at time of origin).
5. Restate the monetary items in the December 31, 1998, balance sheet in terms of December 31, 1999, general purchasing power. Again, conversion factors are used.
6. Apply the "cost or market" rule to the restated amounts of those items to which it applies in the conventional financial statements.
7. Compute the 1999 general price-level gain or loss. This can be accomplished by:
   (a) Analyzing the 1999 changes in net monetary items.
   (b) Restating the changes in terms of December 31, 1999, general purchasing power (most or all of these restated amounts being available from previous computations) to determine what the amount of December 31, 1999, net monetary items would have been had there been no general price-level gain or loss.
   (c) Comparing the amount determined in step (b) above to the actual net monetary items at December 31, 1999, the difference being the general price-level gain or loss.

e. Since monetary assets and liabilities are automatically stated in terms of current general purchasing power, they appear at the same amounts in both conventional statements restated for general price-level changes. Nonmonetary assets and liabilities will usually appear at differing amounts in the two types of statements, as will items appearing on the statement of income and retained earnings. The restated statement of income will include an item not appearing on the conventional statement—the general price-level gain or loss for the year.

f. In presenting comparative supplementary statements at the end of 2000, Barden will have to restate ("roll forward") the 1999 supplementary statements in terms of December 31, 2000, general purchasing power. If this restatement is not made, the supplementary statements will not be presented in comparable terms (units of general purchasing power at a given date).
1. The current exchange rate at December 31, 1999, should be used to translate Ban's cash into dollars. The current exchange rate is the appropriate rate to use when it is desired to translate the account balance to reflect the current monetary equivalent number of dollars. With cash, it is desirable to know how many equivalent dollars Ban had at December 31, 1999, so that this amount can be combined with Dhia's cash on the consolidated statement of financial position.

2. The trade accounts receivable amount should be translated into dollars by using the current exchange rate at December 31, 1999. The current exchange rate should be used for accounts receivable because they are claims to cash, and it is desirable to know the current dollar equivalent of these claims.

3. The amount of supplies inventory should be translated into dollars at the average exchange rate for the last quarter of 1999 (or the actual rate(s) of exchange at the date(s) of purchase, if known). Inventories are conventionally stated at historical cost, and cost in this situation is the equivalent dollar amount invested in the inventory at the date(s) the purchase(s) actually took place.

If the inventory is valued at market in accordance with lower of cost or market, current exchange rates would be used.

4. The cost of the land should be translated into dollars at the exchange rate in effect when the land was purchased in 1996. Land should be reported in the statement of financial position at cost; therefore, the cost in dollars should be determined by translating the foreign currency cost into dollars at the rate of exchange on the date the land was purchased.

5. The amount of the short-term note payable to Shatha National Bank should be translated into dollars at the current exchange rate on December 31, 1999. The note payable represents a claim on cash and, like cash, should be restated in current equivalent dollars at the date of the statement of financial position.

6. The capital stock account must be translated into dollars in two parts; the 10% minority interest and the 90% held by Dhia will be treated separately. The amount for capital stock should be translated into dollars at the rate of exchange at the time the stock was issued in January 1996 for the 10% minority interest, and the actual dollars invested by Dhia should be used for the 90% held by Dhia. Legally, capital stock should be stated at the cost of the investment in the company, which should be determined at the date the stock issuance took place.

7. The amount of retained earnings in the adjusted trial balance is not translated by using any exchange rate because the dollar amount shown in the December 31, 1998, financial statements is used. The amount of the beginning retained earnings is the net result of 1996, 1997, and 1998 earnings and dividends; thus, it is a mixture of many different exchange rates and cannot be translated directly. Therefore, the beginning retained earnings is the dollar amount shown at the end of the preceding accounting period in the financial statements.

8. If sales revenue was earned consistently throughout the year, an average exchange rate for 1999 should be used to translate the amount into dollars. An average rate for the year should be used because it best reflects the equivalent dollars of sales, at the time the sales took place, assuming the earning of revenue took place consistently throughout the year.

9. The amount of depreciation expense can be translated into dollars at the historical rates at the time the buildings were purchased, but an accurate and simpler method would be to translate the amount by applying a ratio to the dollar amount of buildings already determined in the working papers. The ratio is based on the relationship of depreciation expense to building cost, both stated in the foreign currency. Therefore, the expense in the foreign currency and in dollars would be the same ratio of building cost, as stated in their respective currencies. Historical exchange rates are generally used when accounting principles require that the account balance in question be stated in terms of unexpired historical cost. Depreciation expense should be based on historical cost. Use of this historical rate accomplishes a conversion of an historical cost in a foreign currency to historical cost in dollars.

10. The amount of salaries expense should be translated into dollars at an average rate of exchange for 1999. An average rate of exchange should be used because salaries probably were incurred consistently throughout the year; thus, when restated by the average exchange rate the salaries expense would be restated in equivalent dollars.
Franklin Company's Foreign Subsidiary

TRANSLATION OF SELECTED CAPTIONS INTO UNITED STATES DOLLARS
December 31, 1999 and December 31, 1998

<table>
<thead>
<tr>
<th>LCU</th>
<th>Translation</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rate</td>
<td>Dollars</td>
</tr>
</tbody>
</table>

**December 31, 1999**
- Accounts receivable (net) 40,000 LCU | 1.5 LCU to $1 | $26,667
- Inventories, at cost 80,000 LCU | 1.7 LCU to $1 | 47,059
- Property, plant, and equipment (net) 163,000 LCU | Schedule 1 | 86,000
- Long-term debt 100,000 LCU | 1.5 LCU to $1 | 66,667
- Common stock 50,000 LCU | 2 LCU to $1 | 25,000

**December 31, 1998**
- Accounts receivable (net) 35,000 LCU | 1.7 LCU to $1 | 20,588
- Inventories, at cost 75,000 LCU | 2 LCU to $1 | 37,500
- Property, plant, and equipment (net) 150,000 LCU | 2 LCU to $1 | 75,000
- Long-term debt 120,000 LCU | 1.7 LCU to $1 | 70,588
- Common stock 50,000 LCU | 2 LCU to $1 | 25,000

**Schedule 1**

*Computation of Translation of Property, Plant, and Equipment (Net) into United States Dollars at December 31, 1999*

<table>
<thead>
<tr>
<th>LCU</th>
<th>Translation</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rate</td>
<td>Dollars</td>
</tr>
</tbody>
</table>

- Land purchased on January 1, 1998: 24,000 LCU | 2 LCU to $1 | $12,000
- Plant and equipment purchased on January 1, 1998:
  - Original cost 140,000 LCU | 2 LCU to $1 | 70,000
  - Depreciation for 1998 (14,000) LCU | 2 LCU to $1 | (7,000)
  - Depreciation for 1999 (14,000) LCU | 2 LCU to $1 | (7,000)
  - Total 112,000 LCU | 2 LCU to $1 | 56,000
- Plant and equipment purchased on July 4, 1999:
  - Original cost 30,000 LCU | 1.5 LCU to $1 | 20,000
  - Depreciation for 1999 (3,000) LCU | 1.5 LCU to $1 | (2,000)
  - Depreciation for 1999 (27,000) LCU | 1.5 LCU to $1 | 18,000
  - Total 163,000 LCU | 1.5 LCU to $1 | $86,000
NUMBER 5

a. The objectives of translating a foreign subsidiary's financial statements are to:
   • Provide information that is generally compatible with the expected economic effects of a rate change on a subsidiary's cash flows and equity.
   • Reflect the subsidiary's financial results and relationships in single currency consolidated financial statements, as measured in its functional currency and in conformity with GAAP.

b. Applying different exchange rates to the various financial statement accounts causes the restated statements to be unbalanced. The amount required to bring the restated statements into balance is termed the gain or loss from the translation or remeasurement. The gain or loss arising from remeasuring Jay A's financial statements is reported in the consolidated income statement. The gain or loss arising from translating Jay F's financial statements is reported separately under stockholders' equity in the balance sheet.

c. The functional currency is the foreign currency or parent's currency that most closely correlates with the following economic indicators:
   • Cash flow indicators
   • Sales price indicators
   • Sales market indicators
   • Expense indicators
   • Financing indicators
   • Intercompany transactions and arrangement indicators

d. All accounts relating to Jay A's equipment are remeasured by the exchange rate prevailing between the US and Australian dollars at the time equipment was purchased.

   All accounts relating to Jay F's equipment are translated by the current exchange rates prevailing between the US dollar and French franc. For the equipment cost and accumulated depreciation this is the current exchange rate at December 31, 1999. Depreciation expense is translated at the rate prevailing on the date the depreciation expense was recognized or an appropriate weighted average exchange rate for 1999.
Chapter 6 Simulation Exercise

This problem consists of Sections A and B

A:

Dhia Products Company was incorporated in the State of Florida in 1967 to do business as a manufacturer of medical supplies and equipment. Since incorporating, Dhia has doubled the size about every three years and is now considered one of the leading medical supply companies in the country.

During January 1996, Dhia established a subsidiary, Ban, Ltd., in the emerging nation of Shatha. Dhia owns 90% of the outstanding capital stock of Ban; the remaining 10% of Ban's outstanding capital stock is held by Shatha citizens, as required by Shatha constitutional law. The investment in Ban, accounted for by Dhia by the equity method, represents about 18% of the total assets of Dhia at December 31, 1999, the close of the accounting period for both companies.

Required:
Assume it has been appropriate for Dhia and Ban to prepare consolidated financial statements for each year 1996 through 1999 with the U.S. dollar being the functional currency. But before consolidated financial statements can be prepared, the individual account balances in Ban's December 31, 1999, adjusted trial balance must be translated into the appropriate number of United States dollars. For each of the ten (10) accounts listed below, taken from Ban's adjusted trial balance, specify what exchange rate (for example, average exchange rate for 1999, current exchange rate at December 31, 1999, etc.) should be used to translate the account balances into dollars and explain why that rate is appropriate. Number your answers to correspond with each account listed below.

2. Trade accounts receivable (all from 1999 revenues).
3. Supplies inventory (all purchased during the last quarter of 1999).
4. Land (purchased in 1996).
6. Capital stock (no par or stated value and all issued in January 1996).
8. Sales revenue.
10. Salaries expense.

B:

Jay Co.’s 1999 consolidated financial statements include two wholly owned subsidiaries, Jay Co. of Australia (Jay A) and Jay Co. of France (Jay F). Functional currencies are the US dollar for Jay A and the franc for Jay F.

Required:

a. What are the objectives of translating a foreign subsidiary's financial statements?

b. How are gains and losses arising from translating or remeasuring of each subsidiary's financial statements measured and reported in Jay's consolidated financial statements?

c. ASC 815 identifies several economic indicators that are to be considered both individually and collectively in determining the functional currency for a consolidated subsidiary. List three of those indicators.
Chapter 6 Simulation Solution

A:

1. The current exchange rate at December 31, 1999, should be used to translate Ban's cash into dollars. The current exchange rate is the appropriate rate to use when it is desired to translate the account balance to reflect the current monetary equivalent number of dollars. With cash, it is desirable to know how many equivalent dollars Ban had at December 31, 1999, so that this amount can be combined with Dhia's cash on the consolidated statement of financial position.

2. The trade accounts receivable amount should be translated into dollars by using the current exchange rate at December 31, 1999. The current exchange rate should be used for accounts receivable because they are claims to cash, and it is desirable to know the current dollar equivalent of these claims.

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4. The cost of the land should be translated into dollars at the exchange rate in effect when the land was purchased in 1996. Land should be reported in the statement of financial position at cost; therefore, the cost in dollars should be determined by translating the foreign currency cost into dollars at the rate of exchange on the date the land was purchased.

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7. The amount of retained earnings in the adjusted trial balance is not translated by using any exchange rate because the dollar amount shown in the December 31, 1998, financial statements is used. The amount of the beginning retained earnings is the net result of 1996, 1997, and 1998 earnings and dividends; thus, it is a mixture of many different exchange rates and cannot be translated directly. Therefore, the beginning retained earnings is the dollar amount shown at the end of the preceding accounting period in the financial statements.

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10. The amount of salaries expense should be translated into dollars at an average rate of exchange for 1999. An average rate of exchange should be used because salaries probably were incurred consistently throughout the year; thus, when restated by the average exchange rate the salaries expense would be restated in equivalent dollars.
**B:**

a. The objectives of translating a foreign subsidiary's financial statements are to:
   - Provide information that is generally compatible with the expected economic effects of a rate change on a subsidiary's cash flows and equity.
   - Reflect the subsidiary's financial results and relationships in single currency consolidated financial statements, as measured in its functional currency and in conformity with GAAP.

b. Applying different exchange rates to the various financial statement accounts causes the restated statements to be unbalanced. The amount required to bring the restated statements into balance is termed the gain or loss from the translation or remeasurement. The gain or loss arising from remeasuring Jay A's financial statements is reported in the consolidated income statement. The gain or loss arising from translating Jay F's financial statements is reported separately under stockholders' equity in the balance sheet.

c. The functional currency is the foreign currency or parent's currency that most closely correlates with the following economic indicators:
   - Cash flow indicators
   - Sales price indicators
   - Sales market indicators
   - Expense indicators
   - Financing indicators
   - Intercompany transactions and arrangement indicators
Chapter Seven
Accounting Theory
Accounting Standards Codification

This chapter includes ASC 820, Fair Value Measurement and Disclosure, ASC 825, Financial Instruments and a brief reference to ASC 220, Comprehensive Income, ASC 815, Derivatives and Hedges and ASC 320, Investment Debt and Equity Securities. Note: The codification does not include concepts statements so the reference in the text to concepts is correct.
FASB CONCEPTUAL FRAMEWORK

The Financial Accounting Standard Board's conceptual framework consists of five statements identified as Statements of Financial Accounting Concepts "SFAC" 1, 2, 4, 5, and 6. SFAC 3 was superseded by SFAC 6. SFAC 4 deals with non-business organizations. The ideas contained in the conceptual framework for the most part are normative in nature, that is they suggest what financial reporting should be rather than what it currently is, and as a result there is some discrepancy with current accounting practice. Statements of Financial Accounting Concepts are issued by the FASB as guidance in setting accounting principles but are not equivalent to Statements of Financial Accounting Standards. A conceptual statement does not set generally accepted accounting principles but rather address certain issues. Among the major ones:

- Objectives of Financial Reporting by Business Enterprises
- Qualitative Characteristics of Accounting Information
- Elements of Financial Statements of Business Enterprises
- Recognition and Measurement in Financial Statements of Business Enterprises

OBJECTIVES OF FINANCIAL REPORTING

Statement of Financial Accounting Concepts No. 1 establishes and identifies three major objectives of general purpose external financial reporting. The objectives are stated in terms of financial reporting:

Financial reporting should provide information that is useful to present and potential investors and creditors and other users in making rational investment, credit, and similar decisions. The information should be comprehensible to those who have a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence.

Investors and creditors include those users who deal directly with an enterprise as well as those who deal through intermediaries.

The information should help in assessing the amounts, timing, and uncertainty of prospective cash receipts from dividends or interest and the proceeds from the sale, redemption, or maturity of securities or loans.

The prospects for those cash receipts are affected by an enterprise's ability to generate enough cash to meet its obligations when due and its other cash operating needs, to reinvest in operations, and to pay cash dividends and may also be affected by perceptions of investors and creditors generally about that ability, which affect market prices of the enterprise's securities. Thus, financial reporting should provide information to help investors, creditors, and others assess the amounts, timing, and uncertainty of prospective net cash inflows to the related enterprise.

Financial reporting should provide information about the economic resources of an enterprise, the claims to those resources (obligations of the enterprise to transfer resources to other entities and owners' equity), and the effects of transactions, events, and circumstances that change resources and claims to those resources.

In other words, investors, creditors, and others should be able to identify the enterprise's financial strengths and weaknesses and assess its liquidity and solvency. They should be able to measure the enterprise's performance whose primary focus is information about earnings and its components. Information is based on accrual accounting. Information is provided about management's stewardship function. Information is not designed to measure the value of a business. Users make their own decisions, the information is to aid them. Management should identify events...
and circumstances not directly reported in the financial statements and should explain the financial effects of these on the enterprise.

QUALITATIVE CHARACTERISTICS OF ACCOUNTING INFORMATION

Statement of Financial Accounting Concepts No. 2, defines the characteristics which make accounting information useful. These characteristics guide the selection of accounting policies from available alternatives. The qualitative characteristics of accounting information are those that make the information useful to users in the decision-making process. These characteristics are the basis for evaluating the information against the cost of providing and using it and help distinguish more useful information from that which is less useful. The qualitative characteristics of accounting information should be used when faced with different alternatives. There is a hierarchy of desirable qualitative characteristics of accounting information.

The **primary** qualitative characteristics are **relevance** and **reliability**.

**Relevance:** To be relevant to investors, creditors, and other users, accounting information must be capable of making a difference in a decision by helping users to form predictions about the outcomes of past, present, and future events or to confirm or correct expectations reducing uncertainty about future events. Unless information is useful in making decisions, there is no reason to report it. While accuracy of information is important, totally accurate information would not be useful if it did not pertain to the decision being made.

**Reliability:** To be reliable, investors, creditors and other users must be able to depend on accounting information to accurately represent the economic conditions or events that it purports to describe.
Relevance has three ingredients:

- **Predictive value**: information can make a difference in decisions by improving the decision makers' capacity to predict.
- **Feedback value**: confirming or correcting previous expectations.
- **Timeliness**: To be useful, information must be timely otherwise the information is irrelevant for the decision process.

Reliability has three ingredients

- **Verifiability**: Accounting information must be verifiable, that is, several people, making independent evaluations, are likely to obtain the same measures. In other words, there would be a high degree of consensus among independent measurers.
- **Representational faithfulness**: What it is described faithfully discloses the information it represents.
- **Neutrality**: This means rule makers should be concerned with the relevance and reliability of the resulting information, not the effect a new rule may have on a particular interest. Since there are many users of financial accounting information, a general purpose approach is more relevant. The financial statements and footnotes present a complete picture of the current financial position and changes over time, under the assumption that each user will select the elements most relevant to that users purposes.

Information must be trusted to be useful. Trust results from belief that the information is representationally faithful, that is, it is what it claims to be. Financial accounting data is usually based on source documents which can be examined again. This verifiability enhances the reliability of the information. To be relevant, information must have either predictive value or feedback value. To be reliable, information must be neutral. However, sometime the most relevant information may not be the most reliable. For example, future values of assets might be the most relevant information for certain decisions if they could be determined objectively, but they cannot be. Therefore, more objective information based on actual historical transactions is presented under generally accepted accounting principles. Several of the concepts which are included in the hierarchy are closely related to the primary concepts of relevance and reliability.

The secondary qualitative characteristics are **comparability and consistency**.

- **Comparability**: Users evaluate accounting information by comparison. Similar companies should account for similar transactions in similar ways. Operating trends should not be disguised by changing accounting methods. Comparability indicates that the information can be compared to other data in order to identify similarities and differences and allow users to make meaningful comparisons between enterprises.

- **Consistency**: A goal of this concept is comparison of one company's information from one period to the next. The application of methods over time increases the informational value of comparisons and it indicates that accounting policies and procedures remain unchanged from period to period.

There are two constraints related to the usefulness of accounting information.

- **Cost/Benefit**: The usefulness and benefit to be derived from having certain information must exceed the cost of providing it. The cost/benefit pervasive constraint states that unless the benefits to be derived exceed the costs of providing that information, it should not be provided.

- **Materiality**: Is a consideration if it is probable that a person relying on certain information will be influenced in making investment or credit decisions by an error or omission. The materiality of an item must be considered. A small amount, considered immaterial in normal transactions, might influence users of the information when it pertains to an unusual item.

In order to be useful to a particular individual, the information must be understandable. **Understandability** indicates that a user is able to comprehend the information. If a user does not comprehend the information, it creates a necessity for the user to find help in interpreting the information. Financial information is a tool and is useful only if understood by users of it. The FASB has attempted to develop standards that relate to general purpose of decision makers and their abilities to understand financial information. In other words, the most relevant, reliable, and timely information would be useless if it were presented in a manner that isn't understandable. There must be agreement on accounting methods followed and sufficient explanations to allow a user to comprehend the message.
ELEMENTS OF THE FINANCIAL STATEMENTS

Statement of Financial Accounting Concepts No. 6 deals with the elements of financial statements, which are the building blocks with which financial statements are constructed. SFAC 6 defines ten elements that are directly related to measuring the performance and status of an enterprise. The Balance-sheet elements include assets, liabilities, and equity, which describe amounts of resources or claims to resources at a moment in time. The Income Statement elements include income, revenue, expenses, gains, and losses, and describe the effects of transactions and other events and circumstances that affect an enterprise during intervals of time. These two classes of elements are related because assets, liabilities, and equity are changed by elements of the other class and at any time. All elements are defined in relation to a particular entity such as a business enterprise, an educational or charitable organization, or a governmental unit.

Assets are probable future economic benefits obtained or controlled by a particular enterprise as a result of past transactions or events. An asset has the capacity to contribute to future net cash inflows. A particular enterprise can obtain the benefit and control others' access to it. The transaction or other event giving rise to the enterprise's right to the benefit has already occurred.

The common characteristic possessed by all assets and economic resources is "service potential" or "future economic benefit," the capacity to provide services or benefits to the entities that use them. In a business enterprise, that service potential or future economic benefit eventually results in net cash inflows to the enterprise. That characteristic is the primary basis of the definition of assets in this statement. A separate item that reduces or increases the carrying amount of an asset is sometimes found in financial statements. For example, an estimate of uncollectible amounts reduces receivables to the amount expected to be collected, or a premium on a bond receivable increases the receivable to its cost or present value. Those "valuation accounts" are part of the related assets and are neither assets in their own right nor liabilities.

Liabilities are probable future sacrifices of economic benefits arising from present obligations of a particular enterprise to transfer assets or provide services to other enterprises in the future as a result of past transactions or events. A liability is a present duty to other entities that entails settlement by probable future transfer or use of assets at a specified or determinable date, on occurrence of a specified event, or on demand. The duty obligates a particular enterprise, leaving it little or no discretion to avoid the future sacrifice. The transaction or other event obligating the enterprise has already happened.

Uncertainty about economic and business activities and results is pervasive, and it often clouds whether a particular item qualifies as an asset or a liability of a particular enterprise at the time the definitions are applied. The presence or absence of future economic benefit that can be obtained and controlled by the enterprise or of the enterprise's legal, equitable, or constructive obligation to sacrifice assets in the future can often be discerned reliably only with hindsight. As a result, some items that with hindsight actually qualified as assets or liabilities of the enterprise under the definitions may, as a practical matter, have been recognized as expenses, losses, revenues, or gains or remained unrecognized in its financial statements because of uncertainty about whether they qualified as assets or liabilities of the enterprise or because of recognition and measurement considerations stemming from uncertainty at the time of assessment. Conversely, some items that with hindsight did not qualify under the definitions may have been included as assets or liabilities because of judgments made in the face of uncertainty at the time of assessment. A highly significant practical consequence of the features described above is that the existence or amount (or both) of most assets and many liabilities can be probable but not certain. Estimates and approximations will often be required unless financial statements are to be restricted to reporting only cash transactions.

Equity is the residual interest in the assets of an enterprise that remains after deducting its liabilities. In a business enterprise, the equity is the ownership interest. It involves a relationship between an enterprise and its owners in their ownership capacity rather than as employees, suppliers, customers, lenders, or some other non owner role. Since it ranks after liabilities as a claim to, or interest in, the assets of the enterprise, it is a residual interest.

Equity is the same as net assets, the difference between the enterprise's assets and its liabilities. Equity is enhanced or impeded by changes in net assets. Events that affect a business enterprise can be placed into three classes:
1. changes in assets and liabilities not associated with changes in equity
2. changes in assets and liabilities that are accompanied by changes in equity
3. changes in equity that do not affect assets or liabilities.

For example, exchanges of assets for other assets. An enterprise may have several classes of equity (for example, one or more classes each of common stock or preferred stock) with different degrees of risk stemming from different rights to participate in distributions of enterprise assets or different priorities of claims on enterprise assets in the event of liquidation. In contrast, a not-for-profit organization has no ownership interest or profit purpose in the same sense as a business enterprise and thus receives no investments of assets by owners and distributes no assets to owners. Rather, its net assets often are increased by receipts of assets from resource providers (contributors, donors, grantors, and the like) who do not expect to receive either repayment or economic benefits proportionate to the assets provided, but who are nonetheless interested in how the organization makes use of those assets and often impose temporary or permanent restrictions on their use.

Although the line between equity and liabilities is clear in concept, it may be obscured in practice. Applying the definitions to particular situations may involve practical problems because several kinds of securities issued by business enterprises seem to have characteristics of both liabilities and equity in varying degrees or because the names given some securities may not accurately describe their essential characteristics. For example, convertible debt instruments have both liability and residual interest characteristics, which may create problems in accounting for them.

Similarly, the line between net assets and liabilities of not-for-profit organizations may be obscured in practice because donors' restrictions that specify the use of contributed assets may seem to result in liabilities, although most do not. The essence of a not-for-profit organization is that it obtains and uses resources to provide specific types of goods or services, and the nature of those goods or services is often critical in donors' decisions to contribute cash or other assets to a particular organization. Most donors contribute assets (restricted as well as unrestricted) to an organization to increase its capacity to provide those goods or services and receipt of donated assets not only increases the assets of the organization but also imposes a fiduciary responsibility on its management to use those assets effectively and efficiently in pursuit of those service objectives. That responsibility pertains to all of the organization's assets and does not constitute an equitable or constructive obligation. In other words, a not-for-profit organization's fiduciary responsibility to use assets to provide services to beneficiaries does not itself create a duty of the organization to pay cash, transfer other assets, or provide services to one or more creditors. Rather, an obligation to a creditor results when the organization buys supplies for a project, its employees work on it, and the like, and the organization therefore owes suppliers, employees, and others for goods and services they have provided to it. A donor's restriction focuses that fiduciary responsibility on a stipulated use for specified contributed assets but does not change the basic nature of the organization's fiduciary responsibility to use its assets to provide services to beneficiaries. A donor's gift of cash to be spent for a stipulated purpose or of another asset to be used for a stipulated purpose—for example, a mansion to be used as a museum, a house to be used as a dormitory, or a sculpture to be displayed in a cemetery—imposes a responsibility to spend the cash or use the asset in accordance with the donor's instructions. In its effect on the liabilities of the organization, a donor's restriction is essentially the same as management's designating a specified use for certain assets. That is, the responsibility imposed by earmarking assets for specified uses is fundamentally different, both economically and legally, from the responsibility imposed by incurring a liability, which involves a creditor's claim. Consequently, most donor-imposed restrictions on an organization's use of contributed assets do not create obligations that qualify as liabilities of the organization.

**Investments by owners** are increases in net assets of a particular enterprise resulting from transfers to it from other enterprises of something of value to obtain or increase ownership interests (or equity) in it. Assets are most commonly received as investments by owners, but that which is received may also include services or satisfaction or conversion of liabilities of the enterprise.

**Distributions to owners** are decreases in net assets of a particular enterprise resulting from transferring assets, rendering services, or incurring liabilities by the enterprise to owners. Distributions to owners decrease ownership interests or equity in the enterprise.
Comprehensive income is the change in equity (net assets) of an enterprise, during a period, from transactions and other events and circumstances from nonowner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners.

Over the life of a business enterprise, its comprehensive income equals the net of its cash receipts and cash outlays, excluding cash investments by owners and cash distributions to owners. That characteristic holds whether the amounts of cash and comprehensive income are measured in nominal dollars or constant dollars. Timing of recognition of revenues, expenses, gains, and losses is also a major difference between accounting based on cash receipts and outlays and accrual accounting. Accrual accounting may encompass various timing possibilities—for example, when goods or services are provided or when cash is received.

Revenues are inflows or other enhancements of assets of an enterprise or settlements of its liabilities or a combination of both, during a period, from delivering or producing goods, rendering services, or other activities that constitute the enterprise's ongoing major or central operations. Revenues represent cash inflows that have occurred or will eventuate as a result of the enterprise's major operations during the period.

Expenses are outflows or other uses of assets or incurrences of liabilities (or a combination of both), during a period, from delivering or producing goods, rendering services, or carrying out other activities that constitute the enterprise's ongoing major or central operations. Expenses represent cash outflows that have occurred or will occur because of the enterprise's major operations during the period.

Gains are increases in equity, or net assets, from peripheral or incidental transactions of an enterprise and from all other transactions and other events and circumstances affecting the enterprise, during a period, except those that result from revenues or investments by owners.

Losses are decreases in equity (net assets) from peripheral or incidental transactions of an enterprises and from all other transactions and other events and circumstances affecting the enterprise, during a period, except those that result from expenses or distributions to owners.

Articulation is a term used to describe the interrelationship of the elements of the financial statements. Some elements reflect aspects of the enterprise at a point in time, at December 31, 19xx, such as assets, liabilities, and equity. The remaining elements of the financial statements describe effects of transactions and other events and circumstances that occur over periods of time. These two types of elements are related in such a way that assets, liabilities and equity are changed by elements of the other type and at any time are their cumulative result, and an increase or decrease in an asset cannot occur without a corresponding increase or decrease in another asset, liability, or equity. The resulting financial statements are, therefore interrelated, even though they include different elements which reflect different characteristics of the enterprise and its activities.

RECOGNITION AND MEASUREMENT IN FINANCIAL STATEMENTS OF BUSINESS ENTERPRISES

Statement of Financial Accounting Concepts No. 5 sets forth recognition criteria and guidance on what information should be incorporated into financial statements and when. The statement makes the following major conclusions:

Financial statements are a central feature of financial reporting as a principal means of communicating financial information to those outside an entity. Some useful information is better provided by financial statements and some is better provided, or can only be provided, by notes to financial statements, supplementary information, or other means of financial reporting. For items that meet criteria for recognition, disclosure by other means is not a substitute for recognition in financial statements.

Recognition is the process of formally incorporating an item into the financial statements of an entity as an asset, liability, revenue, expense, or the like. A recognized item is depicted in both words and numbers, with the amount included in the statement totals.
A full set of financial statements for a period should show:

- Financial position at the end of the period
- Earnings for the period
- Comprehensive income for the period*
- Cash flows during the period
- Investments by and distributions to owners during the period

ASC 220 requires the disclosure of comprehensive income. (See Chapter 12 for complete disclosure requirements.)

Following are some characteristics of financial statements identified in SFAC 5:

General purpose financial statements are directed toward the common interests of various users and are feasible only because groups of users of financial information have similar needs.

Financial statements, individually and collectively, contribute to meeting the objectives of financial reporting. No one financial statement is likely to provide all the financial statement information that is useful for a particular kind of decision.

The parts of a financial statement also contribute to meeting the objectives of financial reporting and may be more useful to those who make investment, credit, and similar decisions than the whole.

Financial statements result from simplifying, condensing, and aggregating masses of data. As a result, they convey information that would be obscured if great detail were provided. Although those simplifications, condensations, and aggregations are both necessary and useful, the Board believes that it is important to avoid focusing attention almost exclusively on "the bottom line," earnings per share, or other highly simplified condensations.

A statement of financial position provides information about an entity's assets, liabilities, and equity and their relationships to each other at a moment in time. The statement delineates the entity's resource structure—major classes and amounts of assets—and its financing structure—major classes and amounts of liabilities and equity.

A statement of financial position does not purport to show the value of a business enterprise but, together with other financial statements and other information, should provide information that is useful to those who desire to make their own estimates of the enterprise's value. Those estimates are part of financial analysis, not of financial reporting, but financial accounting aids financial analysis.

Statements of earnings and of comprehensive income together reflect the extent to which and the ways in which the equity of an entity increased or decreased from all sources other than transactions with owners during a period.

The concept of earnings set forth in this Statement is similar to net income for a period in present practice; however, it excludes certain accounting adjustments of earlier periods that are recognized in the current period—cumulative effect of a change in accounting principle is the principal example from present practice. The Board expects the concept of earnings to be subject to the process of gradual change or evolution that has characterized the development of net income.

Earnings is a measure of entity performance during a period. It measures the extent to which asset inflows revenues and gains associated with cash-to-cash cycles substantially completed during the period exceed asset outflows expenses and losses associated, directly or indirectly, with the same cycles.

Further guidance in applying the criteria for recognizing components of earnings is necessary because of the widely acknowledged importance of earnings as a primary measure of entity performance. Guidance for recognizing components of earnings is concerned with identifying which cycles are substantially complete and with associating particular revenues, gains, expenses, and losses with those cycles.
The monetary unit or measurement scale in current practice in financial statements is nominal units of money, that is, unadjusted for changes in purchasing power of money over time. The Board expects that nominal units of money will continue to be used to measure items recognized in financial statements.

Earnings and comprehensive income are not the same because certain gains and losses are included in comprehensive income but are excluded from earnings. Those items fall into three classes that are illustrated by certain present practices:

- Foreign currency translation adjustments
- Minimum pension liability adjustments
- Unrealized gains and losses on certain investments in debt and equity securities (example: available-for-sale marketable securities)

THREE OTHER EXAMPLES OF OTHER COMPREHENSIVE INCOME

ASC 815 – Accounting for derivatives and hedging activities added the following additional items to be included in comprehensive income:

- Gains or losses on cash flow hedges.
- Gains or losses on hedges of forecasted foreign-currency-denominated transactions.
- Gains or losses on hedging of a net investment in a foreign operation are reported in comprehensive income as part of the translation adjustment.

A variety of terms are used for net income in present practice. The Board anticipates that a variety of terms will be used in future financial statements as names for earnings for example, net income, profit, or net loss and for comprehensive income for example, total nonowner changes in equity or comprehensive loss.

Comprehensive income is a broad measure of the effects of transactions and other events on an entity, comprising all recognized changes in equity net assets of the entity during a period from transactions and other events and circumstances except those resulting from investments by owners and distributions to owners. Comprehensive income is closely related to the concept of capital maintenance. The full set of financial statements discussed in this Statement is based on the concept of financial capital maintenance. The concept of capital maintenance applied to a particular enterprise will have a direct effect on what is included in comprehensive income. Under the financial capital approach, the effects of changing prices will be included in comprehensive income. Under the physical capital approach, the effects of changing prices will not be included. In other words, physical and financial can be used to separate return on capital (earnings) from return of capital (capital recovery). Assume the company has $1,000 in inventory and at the end of the year the company sells it for $1,500. Also consider that at the end of the year the company needs to spend $1,200 to replace the inventory.

Under the financial capital approach, $1,000 is considered return of investment and $500 is considered return on capital or income. In other words, the effects of changing prices on assets and liabilities are holding gains and losses and part of the return on capital being earned by the enterprise. The objective is to maintain purchasing power.

Under the physical capital approach, $1,200 is considered the sum that must be reinvested to replenish the inventory, and $300 is considered return on capital or income. In other words, the operating capability of the enterprise must be maintained. As a result, changing prices would be part of capital maintenance rather than return on capital. The effects of those changes, referred to as capital maintenance adjustments, are included directly in equity. The objective is to maintain operating capacity.

Future standards may change what is recognized as components of earnings. Future standards may also recognize certain changes in net assets as components of comprehensive income but not of earnings.
A statement of cash flows directly or indirectly reflects an entity's cash receipts classified by major sources and its cash payments classified by major uses during a period, including cash flow information about its operating, financing, and investing activities.

A statement of investments by and distributions to owners reflects an entity's capital transactions during a period—the extent to which and in what ways the equity increased or decreased from transactions with owners as owners.

An item and information about it should meet four fundamental recognition criteria to be recognized and should be recognized when the criteria are met, subject to a cost-benefit constraint and a materiality threshold. Those criteria are:

- **Definitions.** The item meets the definition of an element of financial statements.
- **Measurability.** It has a relevant attribute measurable with sufficient reliability.
- **Relevance.** The information about it is capable of making a difference in user decisions.
- **Reliability.** The information is representationally faithful, verifiable, and neutral.

Items currently reported in the financial statements are measured by different attributes (for example, historical cost, current [replacement] cost, current market value, net realizable value, and present value of future cash flows), depending on the nature of the item and the relevance and reliability of the attribute measured. The Board expects use of different attributes to continue.

Guidance for recognizing revenues and gains is based on their being:

- **Realized or realizable.** Revenues and gains are generally not recognized as components of earnings until realized or realizable and
- **Earned.** Revenues are not recognized until earned. Revenues are considered to have been earned when the entity has substantially accomplished what it must do to be entitled to the benefits represented by the revenues. For gains, being earned is generally less significant than being realized or realizable.

Guidance for expenses and losses is intended to recognize:

- **Consumption of benefit.** Expenses are generally recognized when an entity's economic benefits are consumed in revenue-earning activities or otherwise or
- **Loss or lack of benefit.** Expenses or losses are recognized if it becomes evident that previously recognized future economic benefits of assets have been reduced or eliminated, or that liabilities have been incurred or increased, without associated economic benefits.

In a limited number of situations, the Board may determine that the most useful information results from recognizing the effects of certain events in comprehensive income but not in earnings, and set standards accordingly. Certain changes in net assets that meet the fundamental recognition criteria may qualify for recognition in comprehensive income even though they do not qualify for recognition as components of earnings.

Information based on current prices should be recognized if it is sufficiently relevant and reliable to justify the costs involved and more relevant than alternative information.

Most aspects of current practice are consistent with the recognition criteria and guidance in this Statement, but the criteria and guidance do not foreclose the possibility of future changes in practice. When evidence indicates that information that is more useful (relevant and reliable) than information currently reported is available at a justifiable cost, it should be included in financial statements.

The statement included the following diagram illustrating the umbrella of financial reporting and GAAP.
An accounting principle is "generally accepted" if it is an official pronouncement or has other substantial authoritative support. GAAP is a technical term in financial accounting, encompassing the conventions, rules, and procedures necessary to define accepted accounting practice at a particular time. The standard of "generally accepted accounting principles" includes not only broad guidelines of general application, but also detailed practices and procedures. GAAP is conventional—that is, principles become generally accepted by tacit agreement. The principles have developed on the basis of experience, reason, custom, usage, and practical necessity. In recent years, Opinions of the Accounting Principles Board and standards of the Financial Accounting Standards Board have received considerable emphasis as a major determinant of the composition of generally accepted accounting principles.

GAAP is the result of an evolutionary process and can be expected to change over time. Principles change in response to changes in economic and social conditions, to new knowledge and technology, and to demands by users for more useful information. The FASB Accounting Standards Codification is the most authoritative source of GAAP.
UNDERLYING PRINCIPLES

Revenue Recognition  Revenue is recognized when it is earned, measurable and collectible, that is when the income earning process is complete and an exchange has taken place.

Matching  Dictates that efforts and expenses be matched with the revenue of the period. Some costs are recognized as expenses on the basis of a presumed direct association with specific revenue. Examples of expenses that are recognized by associating cause and effect are sales commissions and costs of products sold or services provided. In the absence of a direct match, some costs are associated with specific accounting periods as expenses in a systematic and rational manner among the periods in which benefits are provided. Examples of items that are recognized in a systematic and rational manner are depreciation of fixed assets, amortization of intangible assets, and allocation of rent and insurance. Some costs associated with the current accounting period are expensed immediately because costs incurred during the period provide no future benefits, costs recorded as assets in prior periods no longer provide discernible benefits, or allocating costs serve no useful purpose. Examples include officers' salaries, selling costs, amounts paid to settle lawsuits.

Unit of Measure  While adequate disclosure requires information about nonmonetary events, comparability and understandability of financial information are enhanced if it is presented in terms of a common denominator. Measurement in terms of money is not completely accurate since the value of money changes over time, but it is the most understandable basis available. The U.S. dollar is the unit of measure in financial accounting in the United States. Changes in its general purchasing power are not recognized in the basic financial statements.

Historical Cost  As a measurement basis, historical cost is the most objectively determinable and it is the proper basis for recording assets, equity, costs, and expenses. However, five measurement attributes are used in current practice.

- Historical cost - historical proceeds
- Current replacement cost
- Current market value
- Net realizable value
- Present - discounted value of future cash flows

Separate Entity  Accounting information is reported as if the business were separate from its owners, customers, employees, and creditors. When consolidated statements are prepared for a group of related businesses, the group is the assumed entity; separate statements for each business assume a different definition of the entity to enhance the usefulness of information.

Disclosure  For information to be relevant, there must be adequate disclosure. This implies knowledge of the use to which the information will be put to differentiate between relevant and irrelevant disclosures.

Going Concern  Unless there is other evidence, accounting information assumes the company will continue in operation long enough to realize its objectives and fulfill its legal obligations.

Objectivity/Verifiability  Information should be free from bias on the part of the individual who prepared the information. If several independent individuals examined the same transactions and used the same reporting principles, the accounting information prepared by each should be the same.

Periodicity  Because of the need for timely information, accounting information is reported for set time intervals. While different time periods might be appropriate for different types of companies, it is generally accepted that information related to annual periods is reported annually.

Consistency  To achieve comparability of accounting information over time, the same accounting methods must be followed. If accounting methods are changed from period to period the effects of the change are disclosed.
MODIFYING CONVENTIONS

Conservatism  Historically, managers, investors, and accountants have generally preferred that possible errors in measurement be in the direction of understatement rather than overstatement of net income and net assets. This has led to the convention of conservatism, which is expressed in rules adopted by the profession as a whole, such as the rule that inventory should be measured at the lower of cost or market. These rules may result in stated net income and net assets at amounts lower than would otherwise result from applying the pervasive measurement principles. Therefore, when confronted with alternative accounting procedures, the accountant follows that which has the least favorable impact on current income. If there are no reasons that make one accounting treatment preferable to another, the least favorable effect on current operations is selected. Losses may be anticipated while gains are normally not recognized in the accounts until they are realized. There is a relationship between the relevance and reliability of accounting information with the convention of conservatism. Conservatism ensures that the uncertainty and risks inherent in business situations are adequately considered. Conservatism should not imply the deliberate understatement of assets and profits and should lead toward fairness of presentation. An attempt to understate results on a consistent basis will lead accounting information to be unreliable.

Emphasis on Income  Over the years, financial statement users, and accountants have increasingly tended to emphasize the importance of net income and that trend has affected the emphasis in financial accounting. Accounting principles that are deemed to increase the usefulness of the income statement are, therefore, sometimes adopted by the profession as a whole regardless of their effect on the balance sheet or other financial statements. For example, the last-in, first-out method of inventory pricing may result in balance sheet amounts for inventories that become further removed from current prices with the passage of time. LIFO, however, is often supported on the grounds that it usually produces an amount for cost of goods sold in determining net income that more closely reflects current prices.

Application of Judgment  Sometimes, strict adherence to the pervasive measurement principles produces results that are considered by the accounting profession to be unreasonable in the circumstances or misleading. The exception to the usual revenue realization rule for long-term, construction-type contracts, for example, is justified in part because adherence to realization at the time of sale would produce results that are considered to be unreasonable. The judgment of the profession is that revenue should be recognized in this situation as construction progresses.

Materiality  If information is insignificant, it has no effect on the decisions of an accounting information user, therefore, there is no need to report that information. Materiality cannot be precisely defined, but is related to absolute values and relationships of an amount to other accounting information.

Industry Practices  Departure from strict compliance with GAAP may exist in some cases due to the peculiar nature of the industry in which an enterprise operates.

Substance over Form  The economic substance of a transaction determines the accounting treatment, even though the legal form of the transaction may indicate a different treatment. In some cases, strict adherence to GAAP produces results that are unreasonable because the legal form of a transaction does not fully represent the underlying intentions of that transaction. For example, some leases are actually purchases of assets, although the legal form of the transaction is a lease, the true intent of a transaction differs from its legal form, the profession supports reporting substance rather than legal form.
### Summary of Conceptual Framework

#### Objectives

**Provide Information**

1. Useful in rational investment and credit decisions
2. Useful in assessing future cash flows
3. About enterprise resources, claims to resources and changes in them

#### Qualitative Characteristics

1. **Pervasive Constraint**
   - Benefits exceed costs
2. **User Specific Qualities**
   - A. Understandability
   - B. Decision usefulness
3. **Primary Qualities**
   - A. Relevance
     - 1. Predictive Value
     - 2. Feedback Value
     - 3. Timeliness
   - B. Reliability
     - 1. Verifiability
     - 2. Representational faithfulness
     - 3. Neutrality
4. **Secondary Qualities**
   - A. Comparability
   - B. Consistency

#### Elements

1. Assets
2. Liabilities
3. Equity
4. Investment by owners
5. Distribution to owners
6. Comprehensive income
7. Revenues
8. Expenses
9. Gains
10. Losses

#### Recognition and Measurement Concepts

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DISCLOSURES ABOUT FAIR VALUE OF FINANCIAL INSTRUMENTS — ASC 825

ASC 825 requires all entities to disclose the fair value of many financial instruments. These disclosures are for both assets and liabilities and also include financial instruments not shown on the balance sheet (“off-balance-sheet”). Examples include accounts, notes, loans receivable and payable, investment securities, options, standby letters of credit and financial guarantees and bonds.

If it is not practical to estimate these fair values, descriptive information about the financial instruments such as the terms of the instrument and why it is not possible to estimate the fair value should be provided.

It is important to note that the disclosure of fair values are provided as supplemental information and do not normally replace the historical cost basis used on the balance sheet. (An exception to this traditional reliance on historical cost is the valuing of certain investments in debt and equity securities at fair market value. (See ASC 320 in chapter 2).

ASC 825 lists a number of items that are covered in other standards and are exempted from coverage by this standard: obligations for pension and other post-retirement benefits, employee stock option and deferred compensation plans, substantially extinguished debt and the related assets in trust, many insurance contracts, lease contracts, obligations and rights resulting from warranties, unconditional purchase obligations, equity method investments, minority interests in consolidated statements, and instruments classified as stockholders’ equity on the balance sheet.

ASC 820, Exemption from Certain Required Disclosures about Financial Instruments for Certain Nonpublic Entities, amends ASC 825, Disclosures about Fair Value of Financial Instruments, to make such disclosures optional for entities that are nonpublic, have total assets of less than $100 million, and have not held or issued any derivative financial instruments, other than loan commitments, during the reporting period.

ASC 820 Fair Value

This statement defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurement.

Definition: “Fair value is the price that would be received to sell the asset or paid to transfer the liability in an orderly transaction between market participants at the measurement date.”

a. Market participants are buyers and sellers who are independent of the entity, knowledgeable, able and willing (not forced) to transact for the asset or liability.

b. The transaction to sell the asset or transfer the liability is a hypothetical transaction at the measurement date that focuses on the price that would be received to sell the asset or paid to transfer the liability (an exit price) not the price that would be paid to acquire the asset or received to assume the liability (and entry price).

c. The reference market is the principal or most advantageous market. If there is only one principal market, then that market determines the fair value. If there is more than one market, then the most advantageous market is used.

For example:

An asset is sold in two different markets, Market A and Market B. In Market A, the asset sells for $100 with a transaction cost of $10 for a net of $90. In Market B, the asset sells for $96 with a transaction cost of $4 for a net of $92. The net cost of $92 is used to select the most advantageous market. Therefore, the Market B price of $96 would be used as the fair value. (Note that the fair value excludes the transaction cost.)

ASC 820 affirms that there is a hierarchy process for selection of fair value which is basically the same hierarchy as in ASC 350 as shown in Chapter 4 on page 4-28.

Level 1 Unadjusted quoted prices for identical assets and liabilities in an active market.
Observable quoted prices for similar assets or liabilities is an active market or identical assets or liabilities in an inactive market.

Level 3 (are not observable)
Fair value is estimated using an appropriate valuation technique such as one or more of the following:

a. Market approach
b. Income approach
c. Cost approach

The market approach is based on information such as observable prices or other information generated by actual transactions involving identical, similar, or otherwise comparable assets or liabilities.

The income approach is based on marketplace expectations about future amounts such as earnings or cash flows. The techniques used include present value or option-pricing models.

The cost approach is based on current replacement cost. It is the cost to buy or build an asset to replace existing service capacity (comparable utility) adjusted for obsolescence.

Disclosures:
The reporting entity shall disclose information that enables the users of its financial statement to evaluate the extent to which fair value is used to assess the inputs used to develop fair value for each category of asset, and liabilities. To meet these objectives the following shall be disclosed:

a. Total fair value measurements on the reporting date
b. Reasons for non-recurring measurements such as impairments
c. Where within the fair value hierarchy the fair value estimates occur such as within Level 1, Level 2, or Level 3.
d. Valuation techniques used for fair value estimates
e. Total gains or losses relating to each major category of assets and liabilities (held or not held) remeasured at fair value during the period. The gains or losses shall be divided between ordinary income and other comprehensive income.
f. The change in unrealized gains or losses during the period for still held remeasured asset and liabilities if the estimates fall within Level 3.

ASC 820

The Fair Value Option for Financial Assets and Financial Liabilities—including an amendment of ASC 320

In ASC 825 the FASB required supplemental disclosures for the Fair Value of certain financial instruments. ASC 820 defined Fair Value and established a hierarchy process for selection of a Fair Value. ASC 820 establishes an option for Financial Assets and Financial Liabilities to be reported on the Financial Statements at Fair Value with the change in Fair Value reported on the income statement. Note that all these pronouncements use the term “financial”. So ASC 820 does not affects items such as inventory, property, plant, equipment intangible assets and asset retirement obligation.

For example, the Paul Company has a notes receivable that has a carrying value of $500,000 and a Fair Value of $575,000. Paul elects to use the Fair Value option. The decision to elect the Fair Value option is irrevocable and as long as Paul holds the notes receivable it must report the receivable at Fair Value.

The journal entry to adjust the notes receivable to Fair Value is the same JE used in Chapter 2 when adjusting the Marketable Debt and Equity Securities to Fair Value:

JE Fair Value Adjustment – N/R 75,000
Unrealized Holding Gains or Loss – N/R 75,000
Just because Paul used the Fair Value option on this note does not mean that the company has to use the Fair Value option on all other notes. As a general rule, the election to use the Fair Value option is made on an instrument by instrument basis. So a portion of the notes may be recorded at Fair Value and others at Carrying Value. The company is allowed to “mix and match”. The only requirement is that the balance sheet differentiates between the notes recorded at Fair Value and the notes recorded at Carrying Value and the unrealized gain or losses to adjust to Fair Value must be reported on the income statement. This same type of process could be used to account for bonds payable at Fair Value.

In ASC 320 in Chapter 2, marketable debt and equity securities were divided into trading, available for sale and held-to-maturity securities. The trading and available for sale securities were shown at Fair Value and the held-to-maturity securities were reported at carrying value. Unrealized holding gains and losses on the total portfolio for trading securities were shown on the income statement whereas the unrealized holding gain and losses on available for sale securities were shown as a part of comprehensive income. Since the held-to-maturity securities were reported at carrying value, unrealized gains and losses were not recorded.

The Fair Value option is available to all these marketable debt and equity securities. As discussed earlier the entity may “mix and match” individual securities. So, some securities could be reported under ASC 320 and others at Fair Value. The major difference is that for all the securities using the Fair Value option the unrealized gains or losses will be reported in the income statement and none of the gains or losses would be reported as a part of comprehensive income. Again, once the Fair Value election is made it is irrevocable and as long as the entity holds the securities, they must be reported at Fair Value.

In Chapter 4, the equity method was used for investments in an investee in which the investor had “substantial influence”. Under this approach, the temporary unrealized gains and losses were not recorded and the Fair Value of the investment was not relevant. The Fair Value option is also available for an investment carried on the equity method. Again, once the Fair Value option is adopted, the decision is irrevocable and the entity cannot revert back to the equity basis.

ASC 820 specifically prohibits the use of the Fair Value option for the following financial items:

A. An investment in a subsidiary that the entity is required to consolidate.
B. An interest in a variable interest entity that the entity is required to consolidate.
C. Pension or other postretirement benefit assets or liabilities representing over or under funded position.
D. Financial assets and liabilities associated with capitalized leases.

This list is not exhaustive but probably includes the items most likely to be covered on the CPA Exam.

What is the objective of ASC 820? The FASB states that:

The objective is to improve financial reporting by providing entities with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities differently without having to apply complex hedge accounting provisions. This Statement is expected to expand the use of fair value measurement, which is consistent with the Board’s long-term measurement objectives for accounting for financial instruments.
The Accounting Environment
Major Parties Involved in the Standard Setting Process

Governmental Accounting Standards Board (GASB)

The GASB was formed in 1984 to be the primary standard setter for state, local governments and all public not-for-profit entities. The purpose was to address the problem of comparability between governmental and private company financial statements. The GASB does not write standards for the US Government.

The International Accounting Standards Board (IASB)

Its purpose is to write International Financial Reporting Standards (IFRS) which will establish an International GAAP. Its main objective is to develop, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require high quality, transparent and comparable information in financial statements and other financial reporting to help participants in the world’s capital markets and other users make economic decisions.

Its overall goal is to promote comparability between the financial statements of companies in different countries and to reduce the cost of preparing International Financial Statements.

Securities and Exchange Commission (SEC)

As a result of the financial reporting problem associated with the Depression, the federal government established the Securities and Exchange Commission. It administers the Securities Act of 1934 and several other securities acts. It has oversight over public companies that are listed on a stock exchange. These companies are required to file annual audited financial statements called Form 10-K with the SEC. The quarterly report is called 10-Q and Form 8-K is a form that must be filed within 4 days to disclose material events.

Although the SEC technically has the right to issue accounting standards, it has generally preferred to allow the AICPA and the FASB to write those pronouncements. It requires all of its registrants to follow GAAP.

The Financial Accounting Standards (FASB)

After the SEC was established in the 30’s and decided to turn over the standard writing responsibility to the private sector, the Committee on Accounting Procedure (CAP) was created by the American Institutes of Accountants (now AICPA). This committee wrote 51 Accounting Research Bulletins (ARBs) and operated from 1938-1959. It was replaced in 1959 by the Accounting Principles Board (APB). The APB operated from 1959-1973 and issued 31 opinions and various interpretations and statements. Although many of the ARBs and APBs have been superseded, a number still exist today as a part of the Accounting Standards Codification. The major concern with both the CAP and the APB was a lack of a conceptual framework.

The FASB was created in 1973 and is the primary standard setting body in the US today. It has issued 8 conceptual framework statements and over 160 FAS Standards. Remember that the conceptual framework pronouncements are not rules but a framework to provide a theoretical guide to establish accounting standards.

The FASB Accounting Standards Codification (FASB ASC)

With the conglomeration of ARBs, APBs, FAS and interpretations in effect, it was impossible to find in one place authoritative literature on an accounting topic. On July 1, 2009, the Accounting Standards Codification was launched. It immediately became the single source of authoritative nongovernmental GAAP. All other accounting
literature became non-authoritative. The codification also contains relevant SEC rules and interpretation. These are noted in the codification with an “S”.

**Research on the FAR Section of the CPA Exam**

The codification is structured by topics, subtopics, sections and subsections. The codification structure is referred to as FASB ASC for FASB Accounting Standards Codification. Listed below are the topics included in the codification:

- **Presentation (Topic Codes 205-299)** – These topics relate only to presentation matters and do not address recognition, measurement, and derecognition matters.
- **Financial Statement Accounts (Topic Codes 305-700)** – The Codification organizes topics in a financial statement order includes Assets, Liabilities, Equity, Revenue, and Expenses.
- **Broad Transactions (Topic codes 805-899)** – These topics relate to multiple financial statement accounts and are generally transaction-oriented. Topics include Business Combinations, Derivatives, Nonmonetary Transactions, and so forth.
- **Industries (Topic codes 905-999)** – These topics relate to accounting that is unique to an industry or type of activity.

To assist with the research the FASB developed a hybrid classification system specifically for the codification as follows: XXX-YY-ZZ-PP. This is the system that will be used for the research on the CPA Exam.

Name FASB ASC

XXX = Topic
YY = Subtopic
ZZ = Section
PP = Paragraph

In the case of SEC content an “S” precedes the section number.

Most colleges now have an Accounting Standards Codification online research capability so that students can learn to research topics in their upper level accounting courses. Even though candidates may have this experience, Lambers strongly encourages them to visit the AICPA website ([www.cpa-exam.org](http://www.cpa-exam.org)) and work the practice research simulations provided. Candidates must learn to navigate the system that will be used on the CPA Exam.

*Note: Of the 7 Tasked-Based simulations on the FAR section of the CPA Exam, it is expected that one or two of the question will include research. See below for a partial listing of ASC topics.*

<table>
<thead>
<tr>
<th>Topic Code</th>
<th>TOPIC</th>
<th>PRESENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>205</td>
<td>Presentation of Financial Statement</td>
<td></td>
</tr>
<tr>
<td>210</td>
<td>Balance Sheet</td>
<td></td>
</tr>
<tr>
<td>215</td>
<td>Statement of Shareholders Equity</td>
<td></td>
</tr>
<tr>
<td>220</td>
<td>Comprehensive Income</td>
<td></td>
</tr>
<tr>
<td>225</td>
<td>Income Statement</td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>Statement of Cash Flows</td>
<td></td>
</tr>
<tr>
<td>235</td>
<td>Notes to Financial Statements</td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>Accounting Change and Error Correction</td>
<td></td>
</tr>
<tr>
<td>255</td>
<td>Changing prices</td>
<td></td>
</tr>
<tr>
<td>260</td>
<td>Earnings per Share</td>
<td></td>
</tr>
<tr>
<td>270</td>
<td>Interim Reporting</td>
<td></td>
</tr>
<tr>
<td>275</td>
<td>Risks and Uncertainties</td>
<td></td>
</tr>
<tr>
<td>280</td>
<td>Segment Reporting</td>
<td></td>
</tr>
</tbody>
</table>

**Assets**
<table>
<thead>
<tr>
<th>305</th>
<th>Cash and Cash Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>310</td>
<td>Receivables</td>
</tr>
<tr>
<td>320</td>
<td>Investments – Debt and Equity Securities</td>
</tr>
<tr>
<td>323</td>
<td>Investments – Equity Method and Joint Ventures</td>
</tr>
<tr>
<td>325</td>
<td>Investments – Other</td>
</tr>
<tr>
<td>330</td>
<td>Inventory</td>
</tr>
<tr>
<td>340</td>
<td>Deferred costs and Other Assets</td>
</tr>
<tr>
<td>350</td>
<td>Intangibles – Goodwill and Other</td>
</tr>
<tr>
<td>360</td>
<td>Property, Plant, and Equipment</td>
</tr>
</tbody>
</table>

**Liabilities**

<table>
<thead>
<tr>
<th>405</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>410</td>
<td>Asset Retirements and Environmental Obligations</td>
</tr>
<tr>
<td>420</td>
<td>Exit or Disposal Cost Obligations</td>
</tr>
<tr>
<td>430</td>
<td>Deferred Revenue</td>
</tr>
<tr>
<td>440</td>
<td>Commitments</td>
</tr>
<tr>
<td>450</td>
<td>Contingencies</td>
</tr>
<tr>
<td>460</td>
<td>Guarantees</td>
</tr>
<tr>
<td>470</td>
<td>Debt</td>
</tr>
<tr>
<td>480</td>
<td>Distinguishing Liabilities from Equity</td>
</tr>
</tbody>
</table>

**Equity**

<table>
<thead>
<tr>
<th>505</th>
<th>Equity</th>
</tr>
</thead>
</table>

**Revenue**

| 605 | Revenue Recognition |

**Expenses**

<table>
<thead>
<tr>
<th>705</th>
<th>Cost of Sales and Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>710</td>
<td>Compensation – General</td>
</tr>
<tr>
<td>712</td>
<td>Compensation – Nonretirement Postemployment Benefits</td>
</tr>
<tr>
<td>715</td>
<td>Compensation – Retirement Benefits</td>
</tr>
<tr>
<td>718</td>
<td>Compensation – Stock Compensation</td>
</tr>
<tr>
<td>720</td>
<td>Other Expenses</td>
</tr>
<tr>
<td>730</td>
<td>Research and Development</td>
</tr>
<tr>
<td>740</td>
<td>Income Taxes</td>
</tr>
</tbody>
</table>

**Broad Transactions**

<table>
<thead>
<tr>
<th>805</th>
<th>Business Combinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>810</td>
<td>Consolidation</td>
</tr>
<tr>
<td>815</td>
<td>Derivatives and Hedges</td>
</tr>
<tr>
<td>820</td>
<td>Fair Value Measurement and Disclosure</td>
</tr>
<tr>
<td>825</td>
<td>Financial Instruments</td>
</tr>
</tbody>
</table>
There are some minor differences between FASB’s Accounting Concepts Statement Chart on page 7-2 of the text and IASB “framework” of concepts. Remember these are concepts, not accounting standards. They are used as guides to create accounting standards.

Listed below are some of the differences:

<table>
<thead>
<tr>
<th>IASB FRAMEWORK</th>
<th>FASB CONCEPTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constraints</td>
<td>Benefits exceed cost</td>
</tr>
<tr>
<td></td>
<td>Benefits exceed cost</td>
</tr>
<tr>
<td>Timeliness</td>
<td>Under relevance</td>
</tr>
<tr>
<td>Balance between qualitative characteristics</td>
<td>Understood but not stated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relevance</th>
<th>Predictive value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Predictive value</td>
</tr>
<tr>
<td>Confirmatory value</td>
<td>Feedback value</td>
</tr>
<tr>
<td>Materiality</td>
<td>Under threshold for recognition</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reliability</th>
<th>Faithful representation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Representational faithfulness</td>
</tr>
<tr>
<td>Neutrality</td>
<td>Neutrality</td>
</tr>
<tr>
<td>Substance over form</td>
<td>NA</td>
</tr>
<tr>
<td>Completeness</td>
<td>Verifiability</td>
</tr>
<tr>
<td>Prudence</td>
<td>NA</td>
</tr>
</tbody>
</table>

Editor’s note: This information should be studied for the first testing window of 2011. The FASB issued concept statement #8 in October 2010 which changed the comparison chart. This new concepts statement will be tested beginning with the second testing window of 2011 and our text will be rewritten at that point.
Chapter Seven
Accounting Theory Questions

OFFICIAL PRONOUNCEMENTS
1. International accounting standards are written by which of the following groups?
   a. FASB
   b. EITF
   c. IASB
   d. ABP

2. Which of the following accounting pronouncements is the most authoritative?
   a. FASB Standards
   b. FASB staff position
   c. AICPA Accounting Principles Board Opinions
   d. Accounting Standards Codification

DEFINITIONS
3. According to the FASB's conceptual framework, the process of reporting an item in the financial statements of an entity is
   a. Recognition.
   b. Realization.
   c. Allocation.
   d. Matching.

4. Determining periodic earnings and financial position depends on measuring economic resources and obligations and changes in them as these changes occur. This explanation pertains to
   a. Disclosure.
   b. Accrual accounting.
   c. Materiality.
   d. The matching concept.

SFAC #2—A HIERARCHY OF ACCOUNTING QUALITIES
5. Which of the following is considered a pervasive constraint by Statement of Financial Accounting Concepts No. 2?
   a. Benefits/costs.
   b. Conservatism.
   c. Timeliness.
   d. Verifiability.

6. Under Statement of Financial Accounting Concepts No. 2, which of the following relates to both relevance and reliability?
   a. Timeliness.
   b. Materiality.
   c. Verifiability.
   d. Neutrality.

7. According to the FASB conceptual framework, predictive value is an ingredient of

<table>
<thead>
<tr>
<th>Reliability</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

8. According to the FASB conceptual framework, which of the following relates to both relevance and reliability?
   a. Comparability.
   b. Feedback value.
   c. Verifiability.
   d. Timeliness.

9. According to the FASB conceptual framework, predictive value is an ingredient of

<table>
<thead>
<tr>
<th>Relevance</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

10. According to the FASB Conceptual Framework, which of the following relates to both relevance and reliability?

    | Consistency | Verifiability |
    |-------------|---------------|
    | a. Yes      | Yes           |
    | b. Yes      | No            |
    | c. No       | Yes           |
    | d. No       | No            |
SFAC #5—COMPREHENSIVE INCOME

11. According to the FASB Conceptual Framework, earnings
   a. Are the same as comprehensive income.
   b. Exclude certain gains and losses that are included in comprehensive income.
   c. Include certain gains and losses that are excluded from comprehensive income.
   d. Include certain losses that are excluded from comprehensive income.

12. According to the FASB's conceptual framework, comprehensive income includes which of the following?

<table>
<thead>
<tr>
<th>Operating income by owners</th>
<th>Investments by owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

13. Under FASB Statement of Financial Accounting Concepts No. 5, which of the following items would cause earnings to differ from comprehensive income for an enterprise in an industry not having specialized accounting principles?
   a. Unrealized loss on investments in available-for-sale marketable equity securities.
   b. Unrealized loss on investments in trading marketable equity securities.
   c. Loss on exchange of similar assets.
   d. Loss on exchange of dissimilar assets.

14. According to the FASB's conceptual framework, comprehensive income includes which of the following?

<table>
<thead>
<tr>
<th>Gross margin</th>
<th>Operating income</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>Yes</td>
</tr>
<tr>
<td>b. No</td>
<td>No</td>
</tr>
<tr>
<td>c. Yes</td>
<td>No</td>
</tr>
<tr>
<td>d. Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

15. Under Statements of Financial Accounting Concepts, comprehensive income includes which of the following?

<table>
<thead>
<tr>
<th>Gains</th>
<th>Gross Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>No</td>
</tr>
<tr>
<td>d. Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

BASIC THEORY

16. The principle of objectivity includes the concept of
   a. Summarization.
   b. Classification.
   c. Conservatism.
   d. Verifiability.

17. What is the underlying concept that supports the immediate recognition of a contingent loss?
   a. Substance over form.
   b. Consistency.
   c. Matching.
   d. Conservatism.

18. Revenue is generally recognized when the earning process is virtually complete and an exchange has taken place. What principle is described herein?
   a. Consistency.
   b. Matching.
   c. Realization.
   d. Conservatism.

19. Periodic net earnings are conventionally measured by a
   a. Transactions approach.
   b. Transactions approach including recognition of unrealized gains and losses.
   c. Capital maintenance approach.
   d. Market value approach including recognition of all realized gains and some unrealized losses.
20. Under what condition is it proper to recognize revenues prior to the sale of the merchandise?
   a. When the ultimate sale of the goods is at an assured sales price.
   b. When the revenue is to be reported as an installment sale.
   c. When the concept of internal consistency (of amounts of revenue) must be complied with.
   d. When management has a long-established policy to do so.

Questions 21, 22, 23 are based on the following information:

SFAS 157 lists various techniques for determining fair value and a hierarchy of procedures (Level 1, Level 2, Level 3) to assist with the determination. Listed below are examples of these techniques:

I. Replacement cost
II. Present value of future cash flows
III. Comparison with the fair value of similar items
IV. Quoted market prices from the New York stock exchange

21. Which of these techniques would be considered as Level 1?
   a. IV
   b. I
   c. I and III
   d. III

22. Which of these techniques would be considered as Level 2?
   a. III
   b. II
   c. I
   d. IV

23. Which of these techniques would be considered as Level 3?
   a. I and II
   b. III and IV
   c. I and III
   d. II

REVIEW QUESTIONS

24. Under Statement of Financial Accounting Concepts No. 2, feedback value is an ingredient of the primary quality of
   
<table>
<thead>
<tr>
<th>Relevance</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

25. According to the FASB's conceptual framework, asset valuation accounts are
   a. Assets.
   b. Neither assets nor liabilities.
   c. Part of stockholders' equity.
   d. Liabilities.

26. According to the FASB conceptual framework, which of the following is an essential characteristic of an asset?
   a. The claims to an asset's benefits are legally enforceable.
   b. An asset is tangible.
   c. An asset is obtained at a cost.
   d. An asset provides future benefits.

27. According to the FASB conceptual framework, which of the following situations violates the concept of reliability?
   a. Financial statements were issued nine months late.
   b. Report data on segments having the same expected risks and growth rates to analysts estimating future profits.
   c. Financial statements included property with a carrying amount increased to management's estimates of market value.
   d. Management reports to stockholders regularly refer to new projects undertaken, but the financial statements never report project results.

28. Under Statement of Financial Accounting Concepts No. 2, timeliness is an ingredient of the primary quality of
   a. Reliability.
   b. Relevance.
   c. Verifiability.
   d. Representational faithfulness.
29. According to the FASB conceptual framework, an entity’s revenue may result from
a. A decrease in an asset from primary operations.
b. An increase in an asset from incidental transactions.
c. An increase in a liability from incidental transactions.
d. A decrease in a liability from primary operations.

30. The FASB’s conceptual framework classifies gains and losses based on whether they are related to an entity's major ongoing or central operations. These gains or losses may be classified as

<table>
<thead>
<tr>
<th>Nonoperating</th>
<th>Operating</th>
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<tbody>
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<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

31. Under Statement of Financial Accounting Concepts No. 2, which of the following interacts with both relevance and reliability to contribute to the usefulness of information?

a. Comparability.
b. Timeliness.
c. Neutrality.
d. Predictive value.

32. According to Statements of Financial Accounting Concepts, neutrality is an ingredient of

<table>
<thead>
<tr>
<th>Reliability</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Yes</td>
<td>No</td>
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<td>No</td>
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<tr>
<td>No</td>
<td>No</td>
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</tbody>
</table>

33. The basis for classifying assets as current or noncurrent is the period of time normally elapsed from the time the accounting entity expends cash to the time it converts

a. Inventory back into cash, or 12 months, whichever is shorter.
b. Receivables back into cash, or 12 months, whichever is longer.
c. Tangible fixed assets back into cash, or 12 months, whichever is longer.
d. Inventory back into cash, or 12 months, whichever is longer.

34. Which of the following is an application of the principle of systematic and rational allocation?

a. Amortization of intangible assets.
b. Sales commissions.
c. Research and development costs.
d. Officers' salaries.

35. In analyzing a company's financial statements, which financial statement would a potential investor primarily use to assess the company's liquidity and financial flexibility?

b. Income statement.
c. Statement of retained earnings.
d. Statement of cash flows.

36. FASB's conceptual framework explains both financial and physical capital maintenance concepts. Which capital maintenance concept is applied to currently reported net income, and which is applied to comprehensive income?

<table>
<thead>
<tr>
<th>Currently reported net income</th>
<th>Comprehensive income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial capital</td>
<td>Physical capital</td>
</tr>
<tr>
<td>Physical capital</td>
<td>Physical capital</td>
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<tr>
<td>Financial capital</td>
<td>Financial capital</td>
</tr>
<tr>
<td>Physical capital</td>
<td>Financial capital</td>
</tr>
</tbody>
</table>

37. According to the FASB conceptual framework, the objectives of financial reporting for business enterprises are based on

a. The need for conservatism.
b. Reporting on management's stewardship.
c. Generally accepted accounting principles.
d. The needs of the users of the information.

38. According to the FASB conceptual framework, which of the following statements conforms to the realization concept?

a. Equipment depreciation was assigned to a production department and then to product unit costs.
b. Depreciated equipment was sold in exchange for a note receivable.
c. Cash was collected on accounts receivable.
d. Product unit costs were assigned to cost of goods sold when the units were sold.
39. The most authoritative body for current accounting literature is
a. FASB
b. FASB Interpretations
c. Accounting Standards Codification
d. Accounting Research Bulletins

40. What are the Statements of Financial Accounting Concepts intended to establish?
a. Generally accepted accounting principles in financial reporting by business enterprises.
b. The meaning of "Present fairly in accordance with generally accepted accounting principles."
c. The objectives and concepts for use in developing standards of financial accounting and reporting.
d. The hierarchy of sources of generally accepted accounting principles.

41. Reporting inventory at the lower of cost or market is a departure from the accounting principle of
a. Historical cost.
b. Consistency.
c. Conservatism.
d. Full disclosure.

42. During a period when an enterprise is under the direction of a particular management, its financial statements will directly provide information about
b. Management performance but not directly provide information about enterprise performance.
c. Enterprise performance but not directly provide information about management performance.
d. Neither enterprise performance nor management performance.

43. What is the purpose of information presented in notes to the financial statements?
a. To provide disclosures required by generally accepted accounting principles.
b. To correct improper presentation in the financial statements.
c. To provide recognition of amounts not included in the totals of the financial statements.
d. To present management's responses to auditor comments.

44. According to the FASB conceptual framework, which of the following situations violates the concept of reliability?
a. Data on segments having the same expected risks and growth rates are reported to analysts estimating future profits.
b. Financial statements are issued nine months late.
c. Management reports to stockholders regularly refer to new projects undertaken, but the financial statements never report project results.
d. Financial statements include property with a carrying amount increased to management's estimate of market value.

45. One of the elements of a financial statement is comprehensive income. Comprehensive income excludes changes in equity resulting from which of the following?
a. Loss from discontinued operations.
b. Prior period error correction.
c. Dividends paid to stockholders.
d. Unrealized loss on investments in noncurrent marketable equity securities.

46. According to the FASB conceptual framework, the objectives of financial reporting for business enterprises are based on
a. Generally accepted accounting principles.
b. Reporting on management's stewardship.
c. The need for conservatism.
d. The needs of the users of the information.

47. According to the FASB conceptual framework, the usefulness of providing information in financial statements is subject to the constraint of
a. Consistency.
b. Cost-benefit.
c. Reliability.
d. Representational faithfulness.

Recently Disclosed Questions

48. According to the FASB conceptual framework, comprehensive income includes which of the following?

<table>
<thead>
<tr>
<th>Loss on Discontinued</th>
<th>Investment by Owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td></td>
</tr>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>
49. According to the FASB conceptual framework, the quality of information that helps users increase the likelihood of correctly forecasting the outcome of past or present events is called
a. Feedback value.
b. Predictive value.
c. Representational faithfulness.
d. Reliability.

50. Which of the following assumptions means that money is the common denominator of economic activity and provides an appropriate basis for accounting measurement and analysis?
   a. Going concern
   b. Periodicity
   c. Monetary unit
   d. Economic entity

51. Which of the following characteristics relates to both accounting relevance and reliability?
   a. Verifiability
   b. Timeliness.
   c. Neutrality.
   d. Comparability.

52. To be relevant, information should have which of the following?
   a. Verifiability.
   b. Feedback value.
   c. Understandability.
   d. Costs and benefits.

53. According to the FASB conceptual framework, certain assets are reported in financial statements at the amount of cash or its equivalent that would have to be paid if the same or equivalent assets were acquired currently. What is the name of the reporting concept?
   a. Replacement cost.
   b. Current market value.
   c. Historical cost.
   d. Net realizable value.
Chapter Seven
Accounting Theory Problems

NUMBER 1
The concept of the accounting entity often is considered to be the most fundamental of accounting concepts, one that pervades all of accounting.

Required:

a. 1. What is an accounting entity? Explain.
   2. Explain why the accounting entity concept is so fundamental that it pervades all of accounting.

b. For each of the following indicate whether the accounting concept of entity is applicable; discuss and give illustrations.
   1. A unit created by or under law.
   2. The product-line segment of an enterprise.
   3. A combination of legal units and/or product-line segments.
   4. All of the activities of an owner or a group of owners.
   5. An industry.
   6. The economy of the United States.

NUMBER 2
Valuation of assets is an important topic in accounting theory. Suggested valuation methods include the following:
- Historical cost (past purchase prices)
- Historical cost adjusted to reflect general price-level changes
- Discounted cash flow (future exchange prices)
- Market price (current selling prices)
- Replacement cost (current purchase prices)

Required:
1. Why is the valuation of assets a significant issue?
2. Explain the basic theory underlying each of the valuation methods cited above. Do not discuss advantages and disadvantages of each method.

NUMBER 3
Mono Tech Co. began operations in 1989 and confined its activities to one project. It purchased equipment to be used exclusively for research and development on the project, and other equipment that is to be used initially for research and development and subsequently for production. In 1990, Mono constructed and paid for a pilot plant that was used until December 1991 to determine the best manufacturing process for the project's product. In December 1991, Mono obtained a patent and received cash from the sale of the pilot plant. In 1992, a factory was constructed and commercial manufacture of the product began.

Required:

a. 1. According to the FASB conceptual framework, what are the three essential characteristics of an asset?

   2. How do Mono's project expenditures through 1991 meet the FASB conceptual framework's three essential characteristics of an asset? Do not discuss why the expenditures may not meet the characteristics of an asset.

   3. Why is it difficult to justify the classification of research and development expenditures as assets?
Chapter Seven
Solutions to Accounting Theory Questions

1. (c) The IASB (International Accounting Standards Board) writes international accounting standards.

2. (d) The Accounting Standards Codification is the most authoritative. It supersedes all other accounting pronouncements.

3. (a) SFAC #5 defines "recognition" as the process of formally incorporating an item into the financial statements of an entity as an asset, liability, revenue, or expense.

4. (b) Accrual accounting requires measurement based upon changes in economic conditions rather than changes in cash. The other responses do not concur at all with the information given.

5. (a) SFAC #2 identified benefits/costs as pervasive constraints of accounting information.

6. (b) Timeliness relates only to relevance and verifiability and neutrality relates only to reliability. Materiality relates to both relevance and reliability.

7. (b) As indicated in the hierarchy of accounting qualities, predictive value is an ingredient of relevance but not reliability.

8. (a) In the Hierarchy of Accounting Qualities (SFAC #2), comparability relates to both relevance and reliability.

9. (d) As indicated in the hierarchy of accounting qualities in SFAC #2, predictive value is an ingredient of relevance but not reliability.

10. (b) SFAC #2 points out that consistency (comparability) relates to both relevance and reliability. However, verifiability relates only to reliability.

11. (b) Comprehensive income is broader than earnings and includes certain gains and losses not included in earnings. Examples are holding losses or gains on available-for-sale marketable equity securities, foreign currency translation adjustments and minimum pension liability adjustments.

12. (a) Comprehensive income includes any type of inflow which culminates an earnings process. There is no earnings process involved in investment by owners.

13. (a) The losses described in (b), (c) and (d) are recognized in earnings as well as in comprehensive income. An unrealized loss on investments in available-for-sale marketable equity securities is not recognized in current earnings but is a factor in measuring comprehensive income.

14. (d) Comprehensive income is a broad measure of the changes in equity over a period except for contributions from, or distributions to, owners.

15. (d) Comprehensive income includes all income items which ultimately increase equity from transactions related to nonowner sources.

16. (d) Objectivity implies the independent verifiability of financial information.

17. (d) The immediate recognition of a contingent loss is an example of conservatism. Concepts Statement #2 defines conservatism as "a prudent reaction to uncertainty to try to ensure that uncertainty and risks inherent in business situations are adequately considered."
18. (c) Realization occurs when the earnings process is complete, e.g., an exchange has taken place and the company received cash or has a claim against another company.

19. (a) Periodic net earnings are normally measured by matching expense transactions and revenue transactions.

20. (a) Only when the ultimate sales price of the product is assured may revenue be recognized prior to sale.

21. (a) Quoted market prices from the New York Stock Exchange

22. (a) Comparison with the fair value of similar items.

23. (a) Replacement cost and present value of future cash flows.

24. (d) Feedback value is an ingredient of the primary quality of relevance.

25. (b) Financial Accounting Concepts #6 states that valuation accounts are part of the related assets or liabilities and neither assets nor liabilities in their own right.

26. (d) By definition, the key element of an asset is its future use or potential.

27. (c) For information to be reliable it must be neutral, verifiable and must represent what it purports to represent (representational faithfulness). To present property at market value instead of carrying is a misrepresentation which causes the financial statements to be unreliable.

28. (b) Timeliness is an ingredient of relevance.

29. (d) SFAC #6 states that gains and losses but not revenues and expenses result from incidental or peripheral transactions. Revenues result from decreases in liabilities or increases in assets from primary operations.

30. (b) Gains or losses are part of comprehensive income but may or may not be from operations or operations-related activities.

31. (a) Comparability interacts with both relevance and reliability.

32. (b) Neutrality is the absence of bias. Concepts Statement #2 lists neutrality, verifiability, and representational faithfulness as elements of reliability.

33. (d) Current assets are those assets which are expected to be used or realized in cash during the next operating cycle, which can be defined as the time elapsed from the time the company spends cash until it turns inventory back into cash, or 12 months, whichever is longer.

34. (a) The other responses are not subject to allocation on a systematic and rational basis.

35. (a) Concepts Statement #5 states that the balance sheet includes "information that is often used in assessing an entity's liquidity and financial flexibility." The current assets are listed in order of liquidity which should allow an assessment of their nearness to cash. An overall analysis of the balance sheet should indicate the financial flexibility to respond to unexpected events.
36. (c) The financial capital maintenance concept defines income as the change in net resources other than owner transactions. Therefore, the dollar investment is subtracted to determine income. This concept is used in the definitions of GAAP net income and comprehensive income. The physical capital maintenance concept defines income as the change in physical production capabilities other than owner transactions. Thus, the current values of assets and liabilities invested in the firm must be deducted to determine net income. Increases or decreases due to price changes for the same capability are not included in net income. This concept is not currently used for GAAP for either net or comprehensive income.

37. (d) The function of reporting is to provide information that is useful to those who make economic decisions. Conservatism, management's stewardship, and generally accepted accounting principles are used in providing the information, not the objective per se.

38. (b) Revenues and gains are **realized** when products or other assets are exchanged for cash or claims to cash. The depreciated equipment was sold in exchange for a note receivable, meaning that the resulting gain had been realized. Choice (a) deals with allocation, (c) deals with conversion of accounts receivable into cash, and (d) deals with matching.

39. (c) The Accounting Standards Codification supersedes all other accounting pronouncements and is the source of the most authoritative literature in the U.S.

40. (c) FASB C-1 intends to establish objectives and concepts for use in developing the standards of financial accounting and reporting to be used as a guideline that will lead to consistent standards. **GAAP** is a technical term that encompasses the conventions, rules, and procedures not only in broad guidelines but also detailed procedures developed on the basis of experience, reason, custom and practical need. **ASB** (Auditing Standards Board) is responsible for developing choice (b). The AICPA's Code of Conduct establishes the hierarchy of sources.

41. (a) ASC 330 states that "a departure from the cost basis of pricing the inventory is required when the utility of the goods is no longer as great as its costs...and the difference should be recognized as a loss of the current period." This utility is considered to be their market value, therefore the term **Lower of Cost or Market. Consistency** is the application of the same accounting principle from one period to the next. **Conservatism** is the practice of avoiding an overly optimistic presentation of assets, income and owner's equity in the financial statements.

42. (c) Financial statements provide information about the financial position or operations of an organization for a stated period, but they do not directly provide information about management performance.

43. (a) Notes to the financial statements provide disclosures required by GAAP necessary to better explain essential additional information to complement the information recognized in the financial statements. The notes are considered an "**integral part of the financial statements.**"

44. (d) For information to be reliable, it must be verifiable, free from bias (neutral) and faithfully represent what is described. Financial statements which include property whose carrying amount has been increased to **management's estimate of fair value** can not be considered reliable. The write up to fair value can not be verified and is certainly not free from bias.

45. (c) Comprehensive income is the change in equity (net assets) of an enterprise during a period from transactions and other events and circumstances from nonowner sources. It includes all changes in equity during a period except those resulting from investments by owners or distributions to owners. In this case, **dividends paid to stockholders** would be distributions to owners and not a part of comprehensive income.

46. (d) FASB #1 Concepts Statement states that one objective of financial reporting is to provide information that is **useful to present and potential investors and creditors and other users** in making rational investment, credit and other similar decisions.
47. (b) FASB Concepts Statement #2 in its hierarchy of accounting qualities lists cost/benefits as a pervasive constraint. This means that financial information will not be required unless its benefits (usefulness) exceed its cost to produce the information.

48. (b) SFAC 6 defines comprehensive income as a broad measure of the effects of transactions and the events on an entity, comprising all recognized changes in net assets of an entity during a period from transactions and other events and circumstances except those resulting from investments by owners and distributions to owners. Therefore, investments by owners in this example would not be a part of comprehensive income.

49. (b) Under Statement of Financial Accounting Concept #2, the “Hierarchy of Accounting Quality” the primary qualitative characteristics are relevance and reliability. Predictive value and feedback value and timeliness are the three ingredients listed under relevance. Predictive value, which is the answer to the question, is defined as information that can make a difference in decisions by improving the decision maker’s capacity to predict. Feedback value is defined as confirming or correcting previous expectations. Reliability states the accounting information reported should accurately represent the economic conditions or events that it purports to describe. Representational faithfulness states that the information presented faithfully discloses the information it represents. (See page 7-2 and 7-3.)

50. (c) This is the definition of the monetary unit assumption.

51. (d) Comparability is the only characteristic that relates to both relevance and reliability. See chart on page 7-2.

52. (b) Feedback value is a concept listed under relevance in concepts statements #2 shown on page 7-2. Study Hint: Candidates should review this chart just before taking the FAR section of the CPA Exam.

53. (a) Keypoint is what would be paid for the same or equivalent assets which is the definition of replacement cost.
Chapter Seven
Solutions to Accounting Theory Problems

NUMBER 1

a. 1. The conventional or traditional approach has been to define the accounting entity in terms of a specific firm or enterprise unit that is separate and apart from the owner or owners and from other enterprises having separate legal and accounting frames of reference. For example, partnerships and sole proprietorships were accounted for separately from the owners although such a distinction might not exist legally. Thus it was recognized that the transactions of the enterprise should be accounted for and reported upon separately from those of the owners.

An extension of this approach is to define the accounting entity in terms of an economic unit that controls resources, makes and carries out commitments and conducts economic activity. In the broadest sense an accounting entity could embrace any object, event or attribute of an object or event for which there is an input-output relationship. Such an accounting entity may be an individual, a profit-seeking or not-for-profit enterprise or any subdivision or attribute thereof for which a system of accounts is maintained. Thus this approach is oriented toward the unit for which financial reports are prepared.

An alternative approach is to define the accounting entity in terms of an area of economic interest to a particular individual, group or institution. The boundaries of such an economic entity would be identified by determining (1) the interested individual, group or institution and (2) the nature of that individual's, group's or institution's interest. Thus this approach is oriented to the users of financial reports.

2. The accounting entity concept defines the area of interest and thus narrows the range and establishes the boundaries of the possible objects, activities or attributes of objects or activities that may be selected for inclusion in accounting records and reports. Further, postulates as to the nature of the entity also may aid in determining (1) what information to include in reports of the entity and (2) how to best present information of the entity so that relevant features are disclosed and irrelevant features do not cloud the presentation.

The applicability of all the other generally accepted concepts (or principles or postulates) of accounting (e.g., continuity, money measurement and time periods) depends upon the established boundaries and nature of the accounting entity. The other accounting concepts lack significance without reference to an entity. The entity must be defined before the balance of the accounting model can be applied and the accounting can begin. Thus the accounting entity concept is so fundamental that it pervades all of accounting.

b. 1. Yes, units created by or under law would include corporations, partnerships and, occasionally, sole proprietorships. Thus legal units probably are the most common types of accounting entities.

2. Yes, a product line or other segment of an enterprise, such as a division, department, profit center, branch or cost center, could be an accounting entity. The stimuli for financial reporting by segment include investors, the Securities and Exchange Commission, financial executives and the accounting profession (SFAS #14).

3. Yes, most large corporations issue consolidated financial reports for two or more legal entities that constitute a controlled economic entity. Accounting for investments in subsidiary companies by the equity method also is an example of an accounting unit that extends beyond the legal entity. The financial reports for a business enterprise that includes two or more product-line segments would also be a form of a consolidated report that most commonly would be considered to be the report of a single legal entity.

4. Yes, although the accounting entity often is defined in terms of a business enterprise that is separate and distinct from other activities of the owner or owners, it also is possible for an accounting entity to embrace all of the activities of an owner or a group of owners. Examples include financial statements for an individual (personal financial statements) and the financial report of a person's estate.

5. Yes, the accounting entity could embrace an industry. Examples include financial data compiled for an industry by a trade association (industry averages) or by the federal government. Probably the best examples of an industry being the accounting entity are in the accounting systems prescribed by the Federal Power Commission and the Federal Communications Commission which define the original cost of an asset in terms of the cost to the person first devoting it to public service.
Yes, the accounting entity concept can embrace the economy of the United States. An example is the national income accounts compiled by the U.S. Department of Commerce. Another area where the entity concept is applicable is in the yet to be developed area of socio-economic accounting.

**NUMBER 2**

1. Valuation of assets is a significant issue because of its effect on the statement of financial position and earnings statement. The valuation method used affects the measurement of total assets and the timing and amount of periodic net earnings. This relationship between asset valuation and measurement of net earnings is referred to as articulation between these two financial statements.

2. Historical-cost valuation reports assets at their acquisition cost (net of depreciation, depletion, or amortization, if applicable) and is the total of exchange prices to obtain an asset and render it suitable to use. Such valuation is measured by cash or cash equivalent sacrificed in exchange for the asset. There is an inherent assumption that a stable monetary unit exists.

   Because acquisition cost is the vital measurement, that amount for limited life assets is allocated on a reasonable basis to future periods as expense or as a factor in the cost of goods sold (if inventory). It is, therefore, the actual past purchase price that affects future period's measurement of net earnings under the matching concept. Because of this emphasis on matching each period's revenue and expense, the earnings emerges as the primary financial statement based on a transactions approach and the statement of financial position becomes partly a statement of unallocated past costs for nonmonetary assets.

   Concerning allocation to the earnings statement under historical-cost valuation, gains are normally recognized in the period they are realized through sale or usage. Unrealized gains are not considered. Unrealized losses, theoretically, should be treated the same as unrealized gains; nonetheless, conventional accounting practice permits recognition of some unrealized losses. This inconsistent treatment is justified under the doctrine of conservatism.

   Historical cost adjusted to reflect general price-level changes is a valuation method which uses the historical cost (discussed above) of nonmonetary assets and applies a general price-level index (CPI) to reflect changes in the standard unit of purchasing power, the dollar, so that the information reported is not biased by changes in the ability of the dollar to command goods and services. In this way, information reported in successive periods (time series data) would be expressed in terms of a constant dollar. Nonmonetary assets are, therefore, stated in terms of the units of general purchasing power as of the date of the statement. These adjusted amounts do not measure any form of "current value" except by coincidence.

   Monetary assets (cash, accounts receivable, etc.) are fixed claims to units of purchasing power which are the same as the units of dollars. Nonetheless, holding net monetary assets (monetary assets in excess of monetary liabilities) during a period of rising prices causes a purchasing power loss because these assets represent a fixed claim to reduced purchasing power. A purchasing power gain occurs by holding net monetary assets during periods of falling prices (or by being a net debtor in periods of rising prices). These purchasing power losses and gains would be shown on a company's earnings statement. They reflect, in part, the stewardship of management during a period of changing price levels.

   Discounted-cash-flow valuation is one method which yields a "current-value" measurement. Under this approach, assets are reported at the present value of their expected future net cash inflows. Thus, it is considered a future exchange price. It reflects the notion that assets represent future service potential (economic benefits) and an attempt should be made to measure this potential (benefit) for reporting.

   When using the discounted-cash-flow approach, net earnings would be equal to the discounted amount of stockholders' equity at the beginning of the period multiplied by the rate used to discount the future net cash flow. This reflects the amount that could be paid out to stockholders and still leave the business as "well off" at the end of the period as it was at the beginning.

   Market-price valuation yields a different "current-value" measurement. Under this approach, assets are reported at their present realizable sales prices at the date of the statement of financial position. These selling prices should be market selling prices of similar assets under conditions of orderly sales, rather than liquidating selling prices under conditions of forced sales. Use of current market selling prices is an indicator of present cash equivalents of the assets and reflects existing market alternatives; such usage does not assume that these assets will necessarily be sold at those prices.

   When using the market-price approach, net earnings would equal net assets (assets minus liabilities) at the end of the period plus capital withdrawals and dividends, less capital additions, less net assets at the beginning of the
period. Net earnings are, therefore, based on the valuation of the firm's assets (and liabilities) because these assets generate such earnings. Net earnings are not based on a transactions approach and, therefore, do not include arbitrary cost allocations to an accounting period.

Replacement-cost valuation yields another, and different "current-value" measurement. Under this approach, assets are reported at their quoted market price to acquire them (replacement in kind). Current replacement cost, which may be approximated by use of a specific price index or by appraisals, reflects supply and demand for the specific asset(s) in question. Replacement cost valuation can be based upon replacement in kind or replacement of equivalent services or benefits.

When using the replacement-cost approach, net earnings include earnings computed by the transactions approach and gains or losses from holding assets (and liabilities) whose purchase prices rise or fall. The earnings statement thus contains some unrealized items (from a conventional viewpoint). Part of the traditionally determined net earnings would, under replacement-cost accounting, be reclassified as holding gains or losses. The earnings statement would show earnings from operations by deducting from current revenue the cost to replace the goods and services consumed in generating that revenue, plus holding gains or less holding losses resulting from changes in the replacement cost of the resources (and obligations) held.

NUMBER 3

a.  1. The essential characteristics of an asset are:
   1. The asset has future economic benefits.
   2. The asset is obtained or controlled by the entity as a result
   3. of past transactions or events.

2. The expenditures for the project provided no immediate revenue or income. Any benefits are probable future economic gains due to the successful completion of the project, the patent and the construction of the manufacturing facility.

   Any assets coming from project expenditures were specifically from past transactions controlled by Mono. The patent has probable future economic benefit.

3. The issue of the probable economic benefit is not clear since any future value following from research and development has not yet been identified or measured. Furthermore, R & D expenditures do not have three essential characteristics of an asset. It is due to this uncertainty that R & D expenditures are expensed as incurred.
Chapter Eight
Statement of Cash Flows (ASC 230)
and Financial Statement Analysis: Accounting Standards Codification

Chapter Eight includes ASC 230 and ASC 320

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Chapter Eight
Statement of Cash Flows (ASC 320)
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A Statement of Cash Flows is a financial statement which shows the cash receipts, cash payments and net change in cash from the operating, investing, and financing activities of an enterprise during a period, in a manner that reconciles beginning and ending cash balances. ASC 230 requires that all business enterprises include a statement of cash flows in a complete set of financial statements. When both the balance sheet (financial position) and income statement (results of operations) are provided, a statement of cash flows must be provided for each period for which an income statement is provided. A statement of cash flows is generally not required for defined benefit pension plans and other employee benefit plans; investment companies subject to the Investment Company Act of 1940; and trusts or similar funds (ASC 230).

The theoretical foundation for the statement of cash flows and its classifications of cash flows is established in FASB Concepts #1 and #5. Concept #1 states that, "financial reporting should provide information to help ... (external users) ... in assessing the amount, timing, and uncertainty of prospective cash receipts..." and that, "expected cash flows to investors and creditors are related to expected cash flows to the enterprise." Concept #5 of the FASB states, "Classification in financial statements facilitates analysis by grouping items with essentially similar characteristics and separating items with essentially different characteristics. Analysis aimed at objectives such as predicting amounts, timing, and uncertainty of future cash flows requires financial information segregated into reasonably homogeneous groups."

Previous accounting practice has been to segregate cash (or funds) flow by sources and uses. The major disadvantages of this grouping are that it does not focus on categories of related cash flows, and has resulted in a lack of comparability among enterprises due to differing definitions of funds, reporting formats and/or classification of transaction. It is also contended that this classification of cash flows frequently explains little concerning an enterprise's ability to meet obligations, pay dividends, or needs for external financing.

To implement the guidelines established in the FASB concepts and to promote consistent, comparable reporting by enterprises, the FASB decided that cash flows must be grouped according to operating, investing and financing activities, thereby enabling significant relationships within and among the three types of enterprise activities to be evaluated.

PURPOSE OF STATEMENT

The primary purpose of the Statement of Cash Flows is to provide external users with relevant information concerning an enterprise's gross cash receipts and payments during a period. This information, if used with related disclosures and information in the other financial statements, should help external users to assess:
1. The enterprise's ability to generate positive net cash flows in the future
2. The enterprise's ability to meet its obligations and pay dividends
3. The enterprise's need for external financing
4. The reasons for differences between net income and associated cash receipts and payments
5. The effects on financial position of both cash and non-cash investing and financing transactions during the period.

Focus on Cash and Cash Equivalents
The primary focus of the statement is on gross cash receipts and payments. However, enterprises commonly invest temporarily idle cash as part of their cash management activities, purchasing and selling short-term, highly liquid investments such as treasury bills, commercial paper and money market funds. These investments are referred to as
cash equivalents and are usually reported with cash on the balance sheet. Whether cash is on hand, on deposit or invested in short-term financial instruments that are readily convertible to known amounts of cash is largely irrelevant to users' assessment of liquidity and future cash flows. Because these transactions relate to cash management activities rather than the operating, investing and financing activities of the enterprise and because the distinction between cash and cash equivalents is largely irrelevant to external users, the details of these transactions are not reported in a statement of cash flows and the focus of the statement is changed to explain the change in cash and cash equivalents.

Requirements for cash equivalents: Cash equivalents are short-term, highly liquid investments that are both:

a) Readily converted to known amounts of cash
b) So near maturity that they present insignificant risk of change in value because of changes in interest rates.

Generally, only investments with original maturities (to the enterprise holding the investment) of three (3) months or less qualify under this definition. Furthermore, the investment should relate to the cash management activities of the enterprise (investment of temporarily idle cash balances) rather than its investing activities (such as bank's or investment company's trading as part of their investment portfolio). Enterprises must develop a clear and consistent policy for determining which short-term highly liquid investments, that satisfy the above criteria for cash equivalents are, and are not treated as cash equivalents for statement purposes. This policy must be disclosed in the footnotes to the financial statements. Any change in the policy should be treated as a change in accounting principle that will require a company to restate financial statements presented for comparative purposes.

REQUIREMENTS: STRUCTURE AND DISCLOSURES

1. The statement shall use descriptive terms such as cash or cash and cash equivalents rather than ambiguous terms such as funds.

2. The statement shall group and classify cash receipts and cash payments as resulting from operating, investing or financing activities of the enterprise.

3. Generally, cash receipts and payments must be presented as gross amounts rather than as net changes in related balance sheet amounts. Exception: Net amounts of related cash receipts and payments may be used for:
   a. When the enterprise is substantively holding or disbursing cash on behalf of its customers (demand deposits of banks, customer accounts payable of a broker-dealer).
   b. Investments (other than cash equivalents), loans receivable (including credit card receivables), and debt, providing that the original maturity of the asset or liability is three (3) months or less. (Because the turnover is quick, the amounts are large, and the maturities are short, information on gross receipts and payments is deemed no more relevant than information about only the net changes.)

4. The statement shall report net cash provided or used by operating, investing and financing activities and the net effect of those flows on cash and cash equivalents during the period in a manner that reconciles beginning and ending cash and cash equivalents.

5. The total amounts of cash and cash equivalents at the beginning and end of the period shown in the statement of cash flows shall be the same amounts as similarly titled line items or subtotals shown on the balance sheet as of those dates.

6. A reconciliation of net income to net cash flow from operating activities shall be provided regardless of whether the direct or indirect method of reporting net cash flow from operating activities is used. The reconciliation shall separately report all major classes of reconciling items.
   * If the direct method is used, the reconciliation shall be provided in a separate schedule.
   * If the indirect method is used, the reconciliation may be either reported within the statement of cash flows or provided in a separate schedule, with the statement of cash flows reporting only the net cash flow from operating activities.
In addition, if the indirect method is used, cash payments for interest (net of amounts capitalized) and income taxes during the period shall be provided in related disclosures.

7. Noncash investing and financing activities that affect recognized assets or liabilities shall be reported in related disclosures (either narrative or summarized in a schedule). For transactions that are part cash and part noncash, only the cash portion shall be reported in the statement of cash flows. The related disclosures shall clearly describe the cash and noncash aspects of such transaction.

8. Cash flow per share shall not be reported in financial statements. Neither cash flow per share, nor any component thereof, is an acceptable alternative to net income or earnings per share as a measure of performance.

9. An enterprise shall disclose its policy for determining which investments are treated as cash equivalents.

**CLASSIFICATIONS OF CASH FLOWS**

**OPERATING ACTIVITIES:** Include all transactions and other events that are not defined as investing or financing activities. Operating activities generally involve producing and delivering goods and/or providing services to customers. Cash flows from operating activities are generally the cash effects of transactions and other events that enter into the determination of net income.

**Cash inflows from operating activities include cash receipts from:**
1. Sale of goods or services.
2. Collection or sale (discounting) of accounts and both short- and long-term notes receivable from customers arising from sales (trade).
3. Interest on loans and investments in debt securities of other enterprises (return on investment).
4. Dividends on investments in equity securities of other enterprises (return on investment).
5. Settlement of lawsuits.
6. Refunds from suppliers.
7. Insurance settlements except those that are directly related to investing or financing activities, such as from destruction of a building.

**Cash outflows from operating activities include cash payment for:**
1. Acquisition of materials for manufacture or goods for resale.
2. Principal payments on accounts and both short- and long-term notes payable to suppliers for materials or goods.
3. Suppliers and employees for other goods or services.
4. Taxes (ASC 230 concluded that allocating income taxes to operating, investing and financing activities would be complex and arbitrary and that the benefits would not justify the cost).
5. Other government imposed duties, fines, fees and penalties.
6. Interest paid to creditors (net of amounts capitalized).
7. Settlement of lawsuits.
8. Contribution to charity.
9. Refunds to customers.

**INVESTING ACTIVITIES:** Include transactions relating to making and collecting loans, acquiring and disposing of: debt or equity investments (other than cash equivalents); property, plant and equipment; and other productive assets. Generally, investing activities relate to the acquisition and disposal of assets other than those directly related to the enterprise's operations (such as trade accounts and notes receivable, inventory, prepaid expenses).

**Cash inflows from investing activities include cash receipts from:**
1. Collection of non-trade loan/note principal (not interest on the loan which relates to operating activities).
2. Sale of non-trade loans/not es receivable (discounting).
3. Sale of debt or equity investments in other enterprises.
4. Returns of equity investments in other enterprises (liquidating dividends, but not regular dividends which are a return on investment).
5. Sale of productive assets (land, buildings, equipment, natural resources, intangibles).

**Cash outflows from investing activities include cash payments for:**
1. Loans made to other entities.
2. Purchase of loans from another entity.
3. To acquire debt or equity investments in other entities.
4. Acquisition of productive assets including interest capitalized as part of the cost of those assets. (Includes payments soon before, at, or soon after the time of purchase. Incurring directly related debt to the seller is a financing transaction and subsequent payments of principal are, therefore, financing cash flow.)
5. Acquisition of a business.

**Cash flows from securities, loans and other assets acquired specifically for resale (ASC 230 and ASC 320)**
1. Banks, brokers and dealers in securities, and other enterprises may carry securities and other assets in a trading account. Cash receipts and cash payments resulting from purchases and sales of securities and other assets shall be classified as operating cash flows if those assets are acquired specifically for resale and are carried at market value in a trading account.
2. Some loans are similar to securities in a trading account in that they are originated or purchased specifically for resale and are held for short periods of time. Cash receipts and cash payments resulting from acquisitions and sales of loans also shall be classified as operating cash flows if those loans are acquired specifically for resale and are carried at market value or at the lower of cost or market value. Cash receipts resulting from sales of loans that were not specifically acquired for resale shall be classified as investing cash inflows. That is, if loans were acquired as investments, cash receipts from sales of those loans shall be classified as investing cash inflows regardless of a change in the purpose for holding those loans.

**FINANCING ACTIVITIES:** Include transactions related to obtaining resources from owners and providing them with a return on, and return of their investment; borrowing money and repaying or otherwise settling the obligation; and obtaining and paying for other resources obtained from creditors on long-term credit.

**Cash inflows from financing activities include cash receipts from:**
1. Issuing equity securities (stocks, detachable warrants).
2. Issuing bonds, notes and other short-term or long-term debt.

**Cash outflows from financing activities include cash payments for:**
1. Dividends or other distributions to owners.
2. Repurchase of the enterprise's equity securities (treasury stock).
3. Repayment of amounts borrowed.
4. Other principal payments to creditors who have extended long-term credit (includes principal payments on seller-financed debt directly related to the acquisition of productive assets, and principal payments on capitalized leases).

**NONCASH INVESTING AND FINANCING ACTIVITIES:** Includes transactions which result in no cash inflow or outflow during the period; however, they affect the assets, liabilities and/or equity of the enterprise. Although these items do not affect the current cash flows of the enterprise, they frequently have a significant effect on the current financial position and on prospective cash flows of the enterprise. For example, a capitalized lease affects both the assets and liabilities of the current period and requires future lease payments in cash; conversion of debt to equity affects the capital structure of the current period and generally eliminate future, nondiscretionary payments of interest.

**Noncash investing and financing activities (to be disclosed in a related schedule or narrative) include:**
1. Conversion of debt to equity.
2. Acquisition of assets by issuance of debt or equity securities or the assumption of debt.
3. Acquisition of assets by entering into a capital lease.
4. Exchanges of noncash assets or liabilities for other noncash assets or liabilities.
Items With Possible Alternative Classification (Marginal Items)
The FASB recognized that the most appropriate classification of items will not always be clear. Certain cash receipts and payments may have aspects of more than one class of cash flow as the three classifications are not clearly mutually exclusive. In those circumstances, the appropriate classification should depend on the nature of the activity that is likely to be the predominant source of cash flows. For example, the acquisition and sale of equipment to be used by the enterprise or rented to others generally are investing activities. However, equipment may be acquired or produced to be used by the enterprise or rented to others for a short period and then sold. In those circumstances, the acquisition or production and subsequent sale of the equipment should be considered operating activities.

DIRECT METHOD OF REPORTING OPERATING CASH FLOW

ASC 230 encourages enterprises to use the direct method in reporting cash flows from operating activities; however, it does not require its use. The direct method reports major classes of gross cash receipts and gross cash payments and the resulting net cash flow from operating activities. Basically, the direct method results in the reporting of a cash basis income statement in the operating activities section of the statement of cash flows.

If the direct method is used, the following classes of operating cash receipts and payments should, at a minimum, be separately reported:

a. Cash collected from customers, including lessees, licensees, and the like
b. Interest and dividends received
c. Other operating cash receipts, if any
d. Cash paid to employees and other suppliers of goods or services, including suppliers of insurance, advertising, and the like.
e. Interest paid (exclusive of amounts capitalized)
f. Income taxes paid
g. Other operating cash payments, if any.

Enterprises are encouraged to provide further breakdowns of operating cash receipts and payments that they consider meaningful and feasible. For example, a retailer or manufacturer might decide to further divide cash paid to employees and suppliers [category (d) above] into payments for costs of inventory and payments for selling, general, and administrative expenses.

Advantages of Direct Method

- The principal advantage of the direct method is that it shows gross operating cash receipts and payments. Knowledge of specific sources of operating cash flows is useful in estimating future cash flows. Commercial lenders generally maintain that amounts of operating cash receipts and payments are particularly important in assessing an enterprise's external borrowing needs and its ability to repay borrowings.
- The direct method is more consistent with the objectives of a statement of cash flows—to provide information concerning gross cash receipts and payments during a period.

Disadvantages of Direct Method

- The direct method does not link the net income reported on the income statement to the cash flow from operating activities.
- The direct method does not provide information about intervals of lead and lags between cash flows and income by showing how the changes in current assets and current liabilities, relating to operations, affect operating cash flows.

Additional Required Disclosures

To avoid the disadvantages associated with the direct method and gain the benefits associated with the indirect method (refer below), ASC 230 requires that if the direct method is used, a reconciliation of net income to net cash flow from operating activities must be provided in a separate disclosure. The reconciliation must meet the same requirements as those for the indirect method (refer below).
Example: The Hiram Supply Company had the following income statement for the year ended December 31, 19X1:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$70,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>30,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>40,000</td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
</tr>
<tr>
<td>Salaries</td>
<td>10,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>5,000</td>
</tr>
<tr>
<td>Interest</td>
<td>3,000</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>$22,000</td>
</tr>
<tr>
<td>Income taxes</td>
<td>3,300</td>
</tr>
<tr>
<td>Net income</td>
<td>18,700</td>
</tr>
</tbody>
</table>

Hiram Supply Company also reported the following changes in current assets and liabilities related to operations:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$8,000 increase</td>
</tr>
<tr>
<td>Inventory</td>
<td>2,500 increase</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>1,300 decrease</td>
</tr>
<tr>
<td>Salaries payable</td>
<td>1,000 increase</td>
</tr>
</tbody>
</table>

Under the direct method, the cash flows from the operating activities section of the statement of cash flows would appear as follows:

Cash flows from operating activities:
- Cash received from customers $62,000
- Cash paid to suppliers *($33,800)
- Cash paid to employees *(9,000)
- Interest paid (3,000)
- Income taxes paid (3,300)

Net cash provided by operating activities $12,900

*Amount may be combined as cash paid to suppliers and employees.

Supporting computations:

Cash received from customers:
- Sales $70,000
- Less increase in accounts receivable (8,000)
- Cash collected $62,000

Cash paid to suppliers:
- Cost of goods sold $30,000
- Add increase in inventory 2,500
- Purchases $32,500
- Add decrease in accounts payable 1,300
- Cash paid to suppliers $33,800

Cash paid to employees:
- Salaries expense $10,000
- Less increase in salaries payable (1,000)
- Cash paid to employees $9,000

8-6
**INDIRECT METHOD OF REPORTING OPERATING CASH FLOWS**

The indirect method reports the same amount for net cash flow from operating activities; however, it does not report major classes of gross cash receipts and payments from operating activities. Rather, the indirect method starts with net income and adjusts it for revenue and expense items that were not the result of operating cash transactions in the current period, to reconcile it to net cash flow from operating activities. The reconciliation must separately report all major classes of reconciling items, including at a minimum, separately reporting changes during the period in receivables, inventory, and payables, pertaining to operating activities and clearly identify all adjustments to net income as reconciling items. The reconciliation may be either within the statement of cash flows or in a separate schedule with the statement reporting only the net cash flow from operating activities.

Common reconciling items to adjust net income to net cash flow from operating activities are:

**Additions to net income**
- decreases in receivables and inventory related to operations
- decrease in prepaid expenses
- increase in payables related to operations
- increases in accrued expenses and deferred income taxes
- depreciation, depletion and amortization expenses
- amortization of discount on notes or bonds payable
- amortization of premium on investments in notes or bonds
- loss on the sale or disposal of productive assets
- loss recognized under the equity method
- loss on discontinued operations
- loss on retirement of debt

**Deductions from net income**
- increases in receivables and inventory related to operations
- increase in prepaid expenses
- decrease in payables related to operations
- decreases in accrued expenses and deferred income taxes
- amortization of premium on notes or bonds payable
- amortization of discount on investments in notes or bonds
- gain on sale or disposal of productive assets
- undistributed income recognized under the equity method
- gain on discontinued operations
- gain on retirement of debt

**Advantages of Indirect Method**
- The principal advantage of the indirect method is that it focuses on the differences between net income and net cash flow from operating activities, linking the income statement to the statement of cash flows. Identifying differences between income items and related cash flows can assist external users to identify differences between enterprises in the measurement and recognition of noncash items that affect income.
- The indirect method provides information about intervals of leads and lags between cash flows and income by showing how the changes in current assets and current liabilities, relating to operations, affect operating cash flows. External users frequently assess future cash flows by first estimating future income (based in part on reports of past income) and then converting those estimates to estimates of future cash flows by allowing for leads and lags between income and cash flows.

**Disadvantages of Indirect Method**
- The indirect method does not show gross operating cash receipts and payments.
- The indirect method is inconsistent with the statement objective of providing information concerning gross cash receipts and payments during a period.
Additional Required Disclosures

If the indirect method is used, related disclosures must include the amounts paid for interest (exclusive of amounts capitalized) and income taxes. This information, together with the information included in the reconciliation of net income to net cash flow from operating activities, should enable external users to indirectly approximate the cash receipts and payments related to operations, and thereby partially avoid the inherent disadvantages of this method.

Example: Using the facts of the example for the direct method (Hiram Supply Company), the cash flows from the operating activities section of the statement of cash flows, under the indirect method, would appear as follows:

Cash flows from operating activities:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>$18,700</td>
</tr>
<tr>
<td>Adjustments to reconcile net income to</td>
<td></td>
</tr>
<tr>
<td>net cash provided by operating activities:</td>
<td></td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>5,000</td>
</tr>
<tr>
<td>Increase in accounts receivable</td>
<td>(8,000)</td>
</tr>
<tr>
<td>Increase in inventory</td>
<td>(2,500)</td>
</tr>
<tr>
<td>Decrease in accounts payable</td>
<td>(1,300)</td>
</tr>
<tr>
<td>Increase in salaries payable</td>
<td>1,000</td>
</tr>
<tr>
<td>Net cash provided by operating activities</td>
<td>$12,900</td>
</tr>
</tbody>
</table>

STEPS FOR PREPARATION OF THE STATEMENT AND REQUIRED DISCLOSURES

1. Prepare the heading and format for the statement of cash flows and for supplemental schedules (such as noncash investing and financing activities), if required. Amounts can be filled in as determined.
2. Determine the balance of cash and cash equivalents as of the beginning and end of the period, and the net change in cash and cash equivalents during the period.
3. Determine the changes in all other balance sheet amounts if this information is not provided.
4. Determine the cash flow from operating activities. Analysis and use of amounts related to operations will depend on whether the direct or indirect method of reporting cash flow from operating activities is used.
   **Direct method:** Convert income statement amounts to major classes of operating cash receipts and payments by adjusting for:
   a. noncash revenue and expenses (such as gains and depreciation)
   b. changes in balance sheet amounts related to operations (primarily changes in current assets, other than cash, and current liabilities which relate to an enterprise's operating cycle, such as receivables, inventory and payables).
   **Indirect method:** Convert net income to cash flow from operations by adjusting for:
   a. noncash revenue and expenses
   b. changes in balance sheet amounts related to operations including, at a minimum, separately reported changes in receivables, inventory and payables related to operating activities
   c. items which are not operating activities.
5. Analyze all other changes in balance sheet amounts to determine and classify:
   a. gross cash receipts and payments relating to investing and financing activities
   b. noncash investing and financing activities for required supplemental disclosure.
6. Proof of totals: The total of the net cash flows from operating (step 4), investing, and financing (step 5) activities should equal the net change in cash and cash equivalents (step 2). The net increase (decrease) in cash and cash equivalents, per the statement, plus the beginning balance of cash and cash equivalents (step 2) should equal the ending balance of cash and cash equivalents (step 2).
### Illustrative Problem
Following are the balance sheets of the Trowel Company as of December 31, 19X2, and 19X1, and its income statement for the year ended December 31, 19X2.

#### Trowel Company
**BALANCE SHEET**  
*December 31, 19X2 and 19X1*

<table>
<thead>
<tr>
<th></th>
<th>19X2</th>
<th>19X1</th>
<th>Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$2,530</td>
<td>$600</td>
<td>$1,930</td>
</tr>
<tr>
<td>Accounts receivable (net of allowance for doubtful accounts of $450 and $600)</td>
<td>$1,785</td>
<td>$1,770</td>
<td>$15</td>
</tr>
<tr>
<td>Notes receivable</td>
<td>150</td>
<td>400</td>
<td>(250)</td>
</tr>
<tr>
<td>Inventory</td>
<td>1,025</td>
<td>1,230</td>
<td>(205)</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>135</td>
<td>110</td>
<td>25</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>7,560</td>
<td>6,460</td>
<td>1,100</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(2,300)</td>
<td>(2,100)</td>
<td>(200)</td>
</tr>
<tr>
<td>Investments</td>
<td>275</td>
<td>250</td>
<td>25</td>
</tr>
<tr>
<td>Intangibles (net)</td>
<td>25</td>
<td>40</td>
<td>(15)</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$11,185</td>
<td>$8,760</td>
<td>$2,425</td>
</tr>
</tbody>
</table>

| **Liabilities:**     |       |       |                   |
| Accounts payable and accrued expenses | $835  | $1,085 | $(250)            |
| Interest payable     | 45    | 30    | 15                |
| Income taxes payable | 25    | 50    | (25)              |
| Short-term debt      | 750   | 450   | 300               |
| Capital lease obligation | 725  | —     | 725               |
| Long-term debt       | 2,050 | 2,150 | (100)             |
| Deferred taxes       | 525   | 375   | 150               |
| Other liabilities    | 275   | 225   | 50                |
| **Total liabilities**| $5,230 | $4,365 |                   |

| **Stockholders' equity:** |       |       |                   |
| Common stock           | 3,000 | 2,000 | 1,000             |
| Retained earnings      | 2,955 | 2,395 | 560               |
| **Total stockholders' equity** | $5,955 | $4,395 |                   |

**Total liabilities and stockholders' equity**  
$11,185  
$8,760  
$2,425
**Trowel Company**  
**INCOME STATEMENT**  
*For the Year Ended December 31, 19X2*

Sales $13,965  

Operating expenses:  
  - Cost of goods sold $10,290  
  - Selling, general and administrative expenses 1,890  
  - Depreciation and amortization 445  
  
Operating income $ 1,340  

Other revenues and expenses:  
  - Equity in income of affiliate $ 45  
  - Gain on sale of equipment 80  
  - Interest income 55  
  - Insurance proceeds 15  
  - Interest expense (235)  
  - Loss from patent infringement lawsuit (30)  
  
Income before taxes $ 1,270  
Provision for income taxes 510  
Net income $ 760  

**Additional information:**  

a. During 19X2, Trowel Company wrote off $350 of accounts receivable as uncollectible and included in its selling, general and administrative expenses a provision for bad debts expense of $200 for the year.  

b. During 19X2, Trowel collected $100 on a note receivable from the sale of inventory and $150 on a note resulting from the sale of property. Interest on these notes amounted to $55 during 19X2 and was collected during the year.  

c. Selling, general and administrative expenses include an accrual of $50 for deferred compensation. The obligation for the deferred compensation was included in other liabilities.  

d. Trowel Company received dividends of $20 from an affiliate accounted for using the equity method.  

e. Trowel Company collected insurance proceeds of $15 from a business interruption claim.  

f. Trowel Company paid $30 to settle a lawsuit relating to patent infringement.  

g. For 19X2, Trowel Company's depreciation totaled $430, and amortization of intangible assets totaled $15.  

h. Trowel Company constructed and placed in services a new plant facility at a cost of $1,000, including capitalized interest of $10.  

i. During 19X2, Trowel Company sold equipment with a book value of $520 and an original cost of $750 for $600 cash. It also entered into a capital lease for new equipment with a fair value of $850. Principal payments under the lease obligation totaled $125 during 19X2.  

j. Trowel Company borrowed and repaid various amounts during the year under a line-of-credit agreement, which provides for repayments within 60 days of the date borrowed. The result of these activities was a net increase of $300 in short-term debt.  

k. Trowel Company issued $400 of long-term debt securities during 19X2.  

l. Trowel Company issued $1,000 of additional common stock of which $500 was issued for cash, and $500 was issued upon conversion of long-term debt.  

m. Trowel Company paid dividends of $200 during 19X2.
STATEMENT OF CASH FLOWS
For the Year Ended December 31, 19X2
(Direct Method)

Cash flows from operating activities:
- Cash received from customers $13,850
- Cash paid to suppliers and employees (12,000)
- Dividends received from affiliate 20
- Interest received 55
- Insurance proceeds received 15
- Interest paid (net of amount capitalized) (220)
- Cash paid to settle lawsuit for patent infringement (30)
- Income taxes paid (385)
  Net cash provided by operating activities $1,305

Cash flows from investing activities:
- Collection on note from sale of property $ 150
- Payments to construct new plant facility (1,000)
- Proceeds from sale of equipment 600
  Net cash used in investing activities (250)

Cash flows from financing activities:
- Net borrowings under line of credit $ 300
- Principal payment on capital lease obligations (125)
- Proceeds from issuance of long-term debt 400
- Proceeds from issuance of common stock 500
- Dividends paid (200)
  Net cash provided by financing activities 875

Net increase in cash and cash equivalents $1,930
Cash and cash equivalents, January 1, 19X2 600
Cash and cash equivalents, December 31, 19X2 $2,530

Note: For explanation of statement amounts refer below to Analysis and Supporting Computations (Direct Method), which follows the same sequence as the amounts in the statement.

Schedule of Noncash Investing and Financing Activities
- A capital lease obligation of $850 was incurred when the company entered into a lease for new equipment.
- Additional common stock was issued upon the conversion of $500 of long-term debt.

If the direct method is used, a separate schedule, "Reconciliation of Net Income to Net Cash Provided by Operating Activities" is required. The schedule would be the same as the "Cash flow from operating activities" section of the statement of cash flows, using the indirect method, except that the title of the schedule would be as shown above. Refer below to the statement of cash flows using the indirect method.

Analysis and Supporting Computations (Direct Method):
- Sequence of analysis and computations follows the sequence of amounts in the statement of cash flows.
- Letters in parentheses refer to additional information provided in the illustrative problem.
Computation of Cash Flows from Operating Activities

1. Cash received from customers:
   - Sales $13,965
   - Less increase in accounts receivable:
     - Increase in A/R—net $15
     - Increase in allowance from bad debts expense 200 (a)
     - Increase in A/R from uncollected sales (215) *
   - Add: Collection on trade notes receivable 100 (b)

   Cash received from customers $13,850

   *Alternative computation:
   - Beginning balance ($1,770 A/R net + $600 allowance) $2,370
   - Less accounts written off as uncollectible (350) (a)
   - Adjusted beginning balance $2,020
   - Ending balance ($1,785 A/R net + $450 allowance) $2,235
   - Increase in A/R from uncollected sales 215

2. Cash paid to suppliers and employees*
   - Cost of goods sold $10,290
   - Selling, general and administrative expenses 1,890
     - Less bad debts expense (200) (a)
     - S.G. & A. expenses requiring cash payments 1,690
   - Adjustments for changes in related balance sheet amounts:
     - Less decrease in inventory 1 (205)
     - Add increase in prepaid expenses 2 25
     - Add decrease in accounts payable and accrued expenses 3 250
     - Less increase in other liabilities 4 (50) (c)

   Total cash paid to suppliers and employees $12,000

   *Cash paid to suppliers and employees cannot be broken down to amounts paid suppliers and amounts paid employees as prepaid expenses, and accounts payable and accrued expenses are not broken down in that manner.

1. The decrease in inventory has been charged to cost of goods sold; however, it does not require the payment of cash in the current period, therefore it is deducted from expenses to determine cash flow.
2. The increase in prepaid expenses resulted from a payment of cash that was not charged to expenses, therefore it is added to expenses to determine cash flow.
3. The decrease in accounts payable and accrued expenses required cash payment, however, did not affect expenses; therefore, it is added to expenses to determine cash flow.
4. The increase in other liabilities resulted from the accrual of an expense that did not require cash payment; therefore, it is deducted from expenses to determine cash flow.

3. Depreciation and amortization are not cash flow items and, therefore, are excluded from the computation of cash flow from operating activities.

4. Dividends received from affiliate:
   - Equity in income of affiliate $45
   - Less dividends received (20) (d)
   - Increase in investment account 25

   Under the equity method of accounting for investments, the investor debits investment and credits equity in income of affiliate for its share of the investee's income. When dividends are received, the investor debits cash and credits
the investment account. (Refer to Chapter 4, Equity Method.) Equity in income of affiliate is not a cash flow item and is excluded from cash flow from operating activities.

5. Gain on sale of equipment is excluded from the computation of cash flows from operating activities because: 1) it is not the gross cash flow from the sale of the equipment, and 2) sale of equipment is an investing activity, not an operating activity.

6. Interest received is the same amount as interest income reported on the income statement ($55). Additional information (b) states that interest of $55 was collected on the notes receivable. This amount agrees to the interest income; therefore, there are no accruals to adjust for.

7. Insurance proceeds received is the same amount as reported on the income statement ($15). Refer to additional information (e).

8. Interest paid:
   
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest expense</td>
<td>$235</td>
</tr>
<tr>
<td>Less increase in interest payable</td>
<td>(15)</td>
</tr>
<tr>
<td>Total interest paid</td>
<td>$220</td>
</tr>
</tbody>
</table>

   Interest paid is qualified as "net of amount capitalized" as interest was capitalized as part of the cost of constructed assets. Refer to additional information (h).

9. Payment for settlement of patent infringement lawsuit is the same amount as the related loss in the income statement. Refer to additional information (f).

10. Income taxes paid:
    
    | Description                        | Amount |
    |------------------------------------|--------|
    | Provision for income taxes         | $510   |
    | Add decrease in income taxes payable| 25     |
    | Less increase in deferred taxes payable| (150) |
    | Total income taxes paid            | $385   |

   Computation and classification of cash flows from investing and financing activities and identification of noncash investing and financing activities.

11. Change in notes receivable (b):
    
    | Description                        | Amount |
    |------------------------------------|--------|
    | Collection of trade note receivable| $100   |
    | Collection of note receivable from sale of property | 150 (investing) |
    | Decrease in notes receivable       | $250   |

12. Changes in P.P. & E. and Accumulated Depreciation:
    
    | Description                        | Amount |
    |------------------------------------|--------|
    | Depreciation expense (g)           | $430   |
    | Construction of new facility (h)   | $1,000 |
    | Sale of equipment for $600 (i)     | (750)  |
    | ($750 cost – $520 book value)      | (230)  |
    | Asset under capital lease (i)      | 850    |
    | Net change                         | $1,100 |

    *The capital lease for new equipment is a noncash investing (asset acquisition) and financing (capital lease obligation) activity.

8-13
13. Change in investments:
   Equity in income of affiliate $45 (operating/noncash)
   Less dividends received (d) (20) (operating)
   Increase in investments from undistributed affiliate income $25

Refer to #4 above regarding the equity method.

14. Change in intangibles: The $15 decrease in intangibles results from amortization expense of $15. Refer to additional information (g).

15. Change in short-term debt: The $300 increase resulted from net borrowings under a line-of-credit agreement. These activities may be shown net as the original maturity of the debt(s) was three (3) months or less. Refer to additional information (i) and requirements section #3.

16. Change in capital lease obligation:
   Original amount of capital lease (i) $850 (noncash)*
   Less: Principal payments (i) (125) (financing)
   Increase in capital lease obligation $725

*The capital lease obligation for the acquisition of new equipment is a noncash investing (asset acquisition) and financing (capital lease obligation) activity.

17. Change in long-term debt:
   Issuance of debt securities for cash (k) $ 400 (financing)
   Retirement of debt securities by conversion to common stock (l) (500) (noncash)*
   Decrease in long-term debt $(100)

*The conversion of bonds to common stock is a noncash financing activity.

18. Change in common stock:
   Issuance of stock for cash $ 500 (financing)
   Issuance of stock on conversion of long-term debt 500 (noncash)*
   Increase in common stock $1,000

*The issuance of common stock upon the conversion of long-term debt is a noncash financing activity.

19. Increase in retained earnings:
   Net income $ 760 (operating)
   Less dividends paid (200) (financing)
   Increase in retained earnings $ 560
Trowel Company

STATEMENT OF CASH FLOWS
For the Year Ended December 31, 19X2
(Indirect Method)

Cash flow from operating activities:

Net income $760

Adjustments to reconcile net income to net cash provided by operating activities:

- Depreciation and amortization expense 445
- Bad debts expense 200
- Undistributed income of affiliate (25)
- Gain on sale of equipment (80)
- Increase in accounts receivable (215)
- Collection of trade notes receivable 100
- Decrease in inventory 205
- Increase in prepaid expenses (25)
- Decrease in accounts payable and accrued expenses (250)
- Increase in interest payable 15
- Decrease in income taxes payable (25)
- Increase in deferred taxes 150
- Increase in other liabilities 50

Net cash flow from operating activities $1,305

Cash flows from investing activities:

- Collection on note from sale of property $150
- Payments to construct new plant facility (1,000)
- Proceeds from sale of equipment 600

Net cash used in investing activities (250)

Cash flows from financing activities:

- Net borrowings under line of credit $300
- Principal payment on capital lease obligations (125)
- Proceeds from issuance of long-term debt 400
- Proceeds from issuance of common stock 500
- Dividends paid (200)

Net cash provided by financing activities 875

Net increase in cash and cash equivalents $1,930
Cash and cash equivalents, January 1, 19X2 600
Cash and cash equivalents, December 31, 19X2 $2,530

Note: For explanation of statement amounts, refer below to Analysis and Supporting Computations (Indirect Method) which follows the same sequence as the amounts in the statement.

If the indirect method is used, supplemental disclosures must be made for:
1. Interest paid (net of amounts capitalized)
2. Income taxes paid
3. Noncash investing and financing activities

These amounts would be the same as in the prior example of the statement of cash flows using the direct method.
Analysis and Supporting Computations (Indirect Method)

- Only analysis and computations relating to cash flow from operating activities are shown in this section. Amounts relating to investing and financing activities are the same as when the direct method is used. Refer to "Analysis and Supporting Computation (Direct Method)" for explanation of amounts related to investing and financing activities.
- Sequence of analysis and computations follow the sequence of amounts shown in the statement.
- Letters in parentheses refer to additional information provided in the illustrative problem.

Computation of cash flow from operating activities:
1. Depreciation and amortization expense are not cash flow items; therefore, the expense for these items would be added back to net income to determine cash flow from operating activities.

2. Bad debts is a noncash expense and would be added to net income to determine cash flow (a).

3. Equity in income of affiliate $45
   Less dividends received (d) (20)
   Undistributed affiliate income and increase in investments $25

4. Gain on sale of equipment relates to investing activities rather than operating activities. Therefore, the gain is deducted from net income to remove its effect.

5. Increase in accounts receivable—net $15
   Increase in allowance from bad debts expense (a) 200
   Increase in accounts receivable $215

Alternative computation of increase in accounts receivable:
   Beginning balance ($1,770 A/R net + $600 allowance) $2,370
   Less accounts written off (a) (350)
   Adjusted beginning balance 2,020
   Ending balance ($1,785 A/R net + $450 allowance) 2,235
   Increase in A/R from uncollected sales $215

6. Collection of trade note receivable (b) in the amount of $100 resulted in cash flow from operation; however, it would not have been included in revenues (and net income) of the current period.

7. The decrease in inventory would have increased cost of goods sold and decreased net income in the current period. Because the decrease is not a cash flow item, it is added to net income to determine cash from operating activities.

8. An increase in prepaid expenses results from cash payments which are not charged to expenses in the current period. The increase is therefore deducted from net income to determine cash flows from operating activities.

9. The decrease in accounts payable and accrued expenses resulted from cash payments which were not charged to expense. The decrease is deducted from net income to determine cash flow related to operating activities.

10. The increase in interest payable results from accrual of unpaid interest expense. The increase is added to net income to remove the effect of unpaid interest expense.

11. A decrease in income taxes payable results from cash payments which are not charged to income taxes in the current period. Therefore, the decrease is deducted from net income to determine cash flow from operating activities.

12. The increase in deferred taxes results from accrual of current period taxes for income determination which are not paid in the current period. The increase is therefore added to net income to determine cash flow from operating activities.
13. The increase in other liabilities results from accrual of deferred compensation (c). Because compensation relates to operating activities, the increase is added to net income to determine cash flow from operating activities.

**FINANCIAL STATEMENT ANALYSIS**

A candidate for the CPA Examination must be able to demonstrate a working knowledge of the **basic** techniques of financial statement analysis. Financial analysis is the process of interpreting the financial statements of an enterprise to identify and evaluate its strengths and weaknesses as reflected in those statements. Accountants rely upon techniques of financial analysis in the performance of the audit function to assist in designing the audit program with respect to scope and specific items to be evaluated. Because of their familiarity with the development of financial statements, accountants are also frequently called upon to analyze and interpret the results of operations as reflected in the statements for management.

Basic techniques of financial statement analysis include:
1. Comparative financial statements and horizontal analysis,
2. Common size statements (vertical analysis),
3. Ratio analysis.

**Comparative Financial Statements and Horizontal Analysis**
Financial statements for two or more years and statements of percentages indicating the relative change in items on the statements over time facilitate the identification, comparison and evaluation of trends. They also provide perspective in evaluating the reasonableness of current performance.

**Common Size Statements**
Statements which express each item on a particular financial statement as a percentage of a base amount emphasize the relationship among the items included, the relative importance of amounts included, and the significance of changes in items from one period to the next.

**Ratio Analysis**
Ratio analysis develops comparisons and measures relationships between two amounts from a single statement or from two different statements. A ratio may be expressed as a percentage (25%), a fraction (1/4) or a comparison of numbers (4 to 1). The essence of ratio analysis is to point out areas where further investigation is warranted.

a. **Basic ratio computations:**

<table>
<thead>
<tr>
<th>RATIO</th>
<th>COMPUTATION</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Current ratio</td>
<td>Current Assets</td>
<td>Primary measure liquidity—able to meet current obligations</td>
</tr>
<tr>
<td></td>
<td>Current Liabilities</td>
<td></td>
</tr>
<tr>
<td>2. Quick ratio (acid test)</td>
<td>C+M/S+Rec or CA – Inv.</td>
<td>Degree of immediate liquidity</td>
</tr>
<tr>
<td></td>
<td>CL</td>
<td></td>
</tr>
<tr>
<td>3. Receivables turnover</td>
<td>Net Credit Sales</td>
<td>Liquidity of receivables—efficiency and collection period</td>
</tr>
<tr>
<td></td>
<td>Av. Rec. (net)</td>
<td></td>
</tr>
<tr>
<td>4. No. of days sales in receivables or Av. collection period</td>
<td>(a) Av. Rec. (net) OR Daily Cr. Sales</td>
<td>No. of days to collect receivables—efficiency of collections</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| 5. Inventory turnover | **Cost of Goods Sold**  
Av. Inv. | Liquidity of inventory and inventory efficiency |
| 6. Days supply in inventory | **Inv. Turnover**  
365 | Efficiency inv. mgmt. over- under-stocking |
| 7. Asset turnover | **Net Sales**  
Total Assets | Efficiency of resource utilization |
| 8. Profit margin  
(return on sales) | **Net Income**  
Net Sales | Profit margin per dollar of sales |
| 9. Return on investment  
(ROI) | **Net Income**  
Total Assets | Earning power of business—profitability—measure of management performance |
| 10. Return on stockholders' equity | **Net Income**  
Stockholders' Equity | Earning power per dollar of owner's investment |
| 11. Debt-equity | **Debt**  
Equity | Relative debt funds—financial structure |
| 12. Equity to total assets  
(equity ratio) | **Owner's Equity**  
Total Assets | % equity financing—protection of creditors |
| 13. Book value per share | **Common stock equity**  
No. shares C/S | CSE=TSE–Liquidating value P/S–cumulative dividends P/S |
| 14. Times interest earned | **Net Income Before Interest and Taxes**  
Interest Expense | Protection of creditors |
| 15. Times fixed charges earned | **Net Income Before Interest and Taxes**  
Interest + Preferred Dividends | Operating risk |
| 16. E.P.S. | **Net Income Available for C/S**  
Av. No. Shares C/S | Earnings per unit of ownership—dividend potential |
| 17. Dividend Payout | **Dividends per share**  
EPS | % profit paid out to owners—% retained for internal finance of growth |
| 18. Price-earning ratio | **Market value per sh. C/S**  
EPS | Indication of relative value of stock risk |
| 19. Dividend yield | **Dividend per share**  
Market value per share | Investment profitability |
b. The DuPont System

The rate of return on investment is generally considered the most important ratio for providing information concerning the general profitability of the firm and the overall effectiveness of management. The DuPont system of analysis highlights and examines in detail the elements comprising the rate of return on investment, emphasizing the effect that various elements of the financial statements have on this ratio. The two major elements which interact to determine R.O.I. are asset turnover and profit margin. The relationship is as follows:

\[ \text{R.O.I.} = \text{Asset Turnover} \times \text{Profit Margin} \]

or

\[ \frac{\text{Net Income}}{\text{Total Assets}} = \frac{\text{Sales}}{\text{Total Assets}} \times \frac{\text{Net Income}}{\text{Sales}} \]

The component elements of asset turnover and profit margin are further subdivided to their component elements as illustrated in the following chart:
IFRS - Statement of Cash Flows

Both IFRS and US GAAP require that the cash flow statement report cash flows from operations, investing and financing activities. Both can elect to report cash from operations at either the indirect or direct methods. The major difference between IFRS and US GAAP is the location on the cash flow statement of interest and dividends. Interest and dividends received may be reported as either operating or investing activities. Interest and dividends paid may be reported as either operating or financing activities. Once the method of reporting is selected, it must be applied on a consistent basis.

Another difference is in the reporting of a significant noncash activity. For example, ABC International issued $1,000,000 of common stock for a building. Under US GAAP this is reported under the cash flow statement but under IFRS it must be disclosed in the notes to the financial statements. Also the cash flow effect of a discontinued operation must be disclosed separately. IFRS also permits the disclosure of a cash flow per share. This is not allowed under US GAAP.

<table>
<thead>
<tr>
<th>Fast Track Summary</th>
<th>IFRS</th>
<th>US GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of Cash Flows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash flow statement reports operations, investing and financing activities</td>
<td>Same</td>
<td>Same</td>
</tr>
<tr>
<td>Cash from operations may be presented using either the indirect or direct method</td>
<td>Same</td>
<td>Same</td>
</tr>
<tr>
<td>Interest and dividends received</td>
<td>Operating or Investing</td>
<td>Operating</td>
</tr>
<tr>
<td>Interest and dividends paid</td>
<td>Operating or Financing</td>
<td>Operating</td>
</tr>
<tr>
<td>Disclosure of non-cash activities statement</td>
<td>Notes to Financial Statements</td>
<td>Usually under the cash flow</td>
</tr>
<tr>
<td>Cash flow per share</td>
<td>Allowed</td>
<td>Not allowed</td>
</tr>
<tr>
<td>Cash Flow-Discontinued operation</td>
<td>must be disclosed separately</td>
<td>Not required</td>
</tr>
</tbody>
</table>
Chapter Eight
Statement of Cash Flows and Financial Statement Analysis Questions

1. Cook Co. had the following balances at December 31, 1992:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash in checking account</td>
<td>$350,000</td>
</tr>
<tr>
<td>Cash in money-market account</td>
<td>250,000</td>
</tr>
<tr>
<td>U.S. Treasury bill, purchased 12/1/92, maturing 2/28/93</td>
<td>800,000</td>
</tr>
<tr>
<td>U.S. Treasury bond, purchased 3/1/92, maturing 2/28/93</td>
<td>500,000</td>
</tr>
</tbody>
</table>

Cook’s policy is to treat as cash equivalents all highly-liquid investments with a maturity of three months or less when purchased. What amount should Cook report as cash and cash equivalents in its December 31, 1992, balance sheet?

a. $600,000
b. $1,150,000
c. $1,400,000
d. $1,900,000

2. Tara Company reported revenue of $1,980,000 in its income statement for the year ended December 31, 1987. Additional information was as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/86</td>
<td>$415,000</td>
</tr>
<tr>
<td>12/31/87</td>
<td>$550,000</td>
</tr>
<tr>
<td>Allowance for</td>
<td>$25,000</td>
</tr>
<tr>
<td>doubtful accounts</td>
<td>40,000</td>
</tr>
</tbody>
</table>

No uncollectible accounts were written off during 1987. Had the cash basis of accounting been used instead, Tara would have reported receipts for 1987 of

a. $2,115,000
b. $1,885,000
c. $1,860,000
d. $1,845,000

3. Which of the following information should be disclosed as supplemental information in the statement of cash flows?

<table>
<thead>
<tr>
<th>Cash flow per share</th>
<th>Conversion of debt to equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

4. Which of the following would be subtracted in converting net earnings to cash provided by operations in the current period in a consolidated statement of cash flows?

a. Amortization of premium on bonds payable.
b. Amortization of patent.
c. Increase in deferred income tax liability.
d. Minority interest's share of net earnings.

5. In a statement of cash flows, which of the following items is reported as a cash outflow from financing activities?

I. Payments to retire mortgage notes.
II. Interest payments on mortgage notes.
III. Dividend payments

a. I, II, and III.
b. II and III.
c. I only.
d. I and III.

6. How should a gain from the sale of used equipment for cash be reported in a statement of cash flows using the indirect method?

a. In investment activities as a reduction of the cash inflow from the sale.
b. In investment activities as a cash outflow.
c. In operating activities as a deduction from income.
d. In operating activities as an addition to income.

7. In a statement of cash flows, what amount is included in investing activities for the above transaction?

a. Cash payment.
b. Acquisition price.
c. Zero.
d. Mortgage amount.
8. In a statement of cash flows, what amount is included in financing activities for the above transaction?
   a. Cash payment.
   b. Acquisition price.
   c. Zero.
   d. Mortgage amount.

9. In a statement of cash flows, receipts from sales of property, plant, and equipment and other productive assets should generally be classified as cash inflows from
   a. Operating activities.
   b. Financing activities.
   c. Investing activities.
   d. Selling activities.

10. In a statement of cash flows, which of the following would increase reported cash flows from operating activities using the direct method? (Ignore income tax considerations.)
   a. Dividends received from investments.
   b. Gain on sale of equipment.
   c. Gain on early retirement of bonds.
   d. Change from straight-line to accelerated depreciation.

11. Which of the following cash flows per share should be reported in a statement of cash flows? 
   a. Primary cash flows per share only.
   b. Fully diluted cash flows per share only.
   c. Both primary and fully diluted cash flows per share.
   d. Cash flows per share should not be reported.

12. The following information was taken from the 1990 financial statements of Planet Corp.:
   Accounts receivable, January 1, 1990 $ 21,600
   Accounts receivable, December 31, 1990 30,400
   Sales on account and cash sales 438,000
   Uncollectible accounts 1,000
   No accounts receivable were written off or recovered during the year.

   If the direct method is used in the 1990 statement of cash flows, Planet should report cash collected from customers as
   a. $447,800
   b. $446,800
   c. $429,200
   d. $428,200

13. Kresley Co. has provided the following 1990 current account balances for the preparation of the annual statement of cash flows:

<table>
<thead>
<tr>
<th>January 1</th>
<th>December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable $11,500</td>
<td>$14,500</td>
</tr>
<tr>
<td>Allowance for uncollectible accounts 400</td>
<td>500</td>
</tr>
<tr>
<td>Prepaid rent expense 6,200</td>
<td>4,100</td>
</tr>
<tr>
<td>Accounts payable 9,700</td>
<td>11,200</td>
</tr>
</tbody>
</table>

   Kresley's 1990 net income is $75,000. Net cash provided by operating activities in the statement of cash flows should be
   a. $72,700
   b. $74,300
   c. $75,500
   d. $75,700

**Items 14 through 16** are based on the following information:

Dice Corp.'s balance sheet accounts as of December 31, 1988 and 1987, and information relating to 1988 activities are presented below.

<table>
<thead>
<tr>
<th>December 31,</th>
<th>1988</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td>1988</td>
<td>1987</td>
</tr>
<tr>
<td>Cash</td>
<td>$230,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>300,000</td>
<td>--</td>
</tr>
<tr>
<td>Accounts receivable,- net</td>
<td>510,000</td>
<td>510,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>680,000</td>
<td>600,000</td>
</tr>
<tr>
<td>Long-term investments</td>
<td>200,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Plant assets</td>
<td>1,700,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(450,000)</td>
<td>(450,000)</td>
</tr>
<tr>
<td>Goodwill</td>
<td>90,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Total assets</td>
<td>$2,160,000</td>
<td>$2,160,000</td>
</tr>
</tbody>
</table>

**Liabilities and Stockholders' Equity**

| Accounts payable and accrued liabilities | $825,000 | $720,000 |
| Short-term debt                          | 325,000  | --       |
| Common stock, $10 par                    | 700,000  |          |
| Additional paid-in capital               | 370,000  | 250,000  |
| Retained earnings                       | 940,000  | 490,000  |

Total liabilities and stockholders' equity | $2,160,000 | $2,160,000 |
Information relating to 1988 activities

- Net income for 1988 was $690,000.
- Cash dividends of $240,000 were declared and paid in 1988.
- Equipment costing $400,000 and having a carrying amount of $150,000 was sold in 1988 for $150,000.
- A long-term investment was sold in 1988 for $135,000. There were no other transactions affecting long-term investments in 1988.
- 10,000 shares of common stock were issued in 1988 for $22 a share.
- Short-term investments consist of treasury bills maturing on 6/30/89.

14. Net cash provided by Dice's 1988 operating activities was
   a. $690,000
   b. $915,000
   c. $940,000
   d. $950,000

15. Net cash used in Dice's 1988 investing activities was:
   a. $1,115,000
   b. $895,000
   c. $865,000
   d. $815,000

16. Net cash provided by Dice's 1988 financing activities was
   a. $305,000
   b. $440,000
   c. $455,000
   d. $545,000

17. What amount should Reve report as net cash used in investing activities?
   a. $170,000
   b. $176,000
   c. $188,000
   d. $194,000

18. What amount should Reve report as net cash provided by financing activities?
   a. $20,000
   b. $27,000
   c. $30,000
   d. $37,000

Items 19 and 20 are based on the following:

Kollar Corp.'s transactions for the year ended December 31, 1988, included the following:

- Purchased real estate for $550,000 cash which was borrowed from a bank.
- Sold investment securities for $500,000.
- Paid dividends of $600,000.
- Issued 500 shares of common stock for $250,000.
- Purchased machinery and equipment for $125,000 cash.
- Paid $450,000 toward a bank loan.
- Reduced accounts receivable by $100,000.
- Increased accounts payable by $200,000.

19. Kollar's net cash used in investing activities for 1988 was
   a. $675,000
   b. $375,000
   c. $175,000
   d. $50,000

20. Kollar's net cash used in financing activities for 1988 was
   a. $50,000
   b. $250,000
   c. $450,000
   d. $500,000
21. Bee Co. uses the direct write-off method to account for uncollectible accounts receivable. During an accounting period, Bee's cash collections from customers equal sales adjusted for the addition or deduction of the following amounts:

<table>
<thead>
<tr>
<th>Accounts written-off</th>
<th>Increase in accounts receivable balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Deduction</td>
<td>Deduction</td>
</tr>
<tr>
<td>b. Addition</td>
<td>Deduction</td>
</tr>
<tr>
<td>c. Deduction</td>
<td>Addition</td>
</tr>
<tr>
<td>d. Addition</td>
<td>Addition</td>
</tr>
</tbody>
</table>

22. In 1990, a tornado completely destroyed a building belonging to Holland Corp. The building cost $100,000 and had accumulated depreciation of $48,000 at the time of the loss. Holland received a cash settlement from the insurance company and reported an extraordinary loss of $21,000. In Holland's 1990 cash flow statement, the net change reported in the cash flows from investing activities section should be a
a. $10,000 increase.
b. $21,000 decrease.
c. $31,000 increase.
d. $52,000 decrease.

23. During 1990, Teb, Inc., had the following activities related to its financial operations:

Payment for the early retirement of long-term bonds payable (carrying value $740,000) $750,000
Distribution in 1990 of cash dividend declared in 1989 to preferred shareholders 62,000
Carrying value of convertible preferred stock in Teb, converted into common shares 120,000
Proceeds from sale of treasury stock (carrying value at cost, $86,000) 95,000

In Teb's 1990 statement of cash flows, net cash used in financing activities should be
a. $717,000
b. $716,000
c. $597,000
d. $535,000

24. Alp, Inc., had the following activities during 1990:
- Acquired 2,000 shares of stock in Maybel, Inc., for $26,000.
- Sold an investment in Rate Motors for $35,000 when the carrying value was $33,000.
- Acquired a $50,000, 4-year certificate of deposit from a bank. (During the year, interest of $3,750 was paid to Alp.)
- Collected dividends of $1,200 on stock investments.

In Alp's 1990 statement of cash flows, net cash used in investing activities should be
a. $37,250
b. $38,050
c. $39,800
d. $41,000

25. On September 1, 1992, Canary Co. sold used equipment for a cash amount equaling its carrying amount for both book and tax purposes. On September 15, 1992, Canary replaced the equipment by paying cash and signing a note payable for new equipment. The cash paid for the new equipment exceeded the cash received for the old equipment. How should these equipment transactions be reported in Canary’s 1992 statement of cash flows?

a. Cash outflow equal to the cash paid less the cash received.
b. Cash outflow equal to the cash paid and note payable less the cash received.
c. Cash inflow equal to the cash received and a cash outflow equal to the cash paid and note payable.
d. Cash inflow equal to the cash received and a cash outflow equal to the cash paid.

26. Mend Co. purchased a three-month U.S. Treasury bill. Mend's policy is to treat as cash equivalents all highly liquid investments with an original maturity of three months or less when purchased. How should this purchase be reported in Mend's statement of cash flows?

a. As an outflow from operating activities.
b. As an outflow from investing activities.
c. As an outflow from financing activities.
d. Not reported.
27. Which of the following is not disclosed on the statement of cash flows when prepared under the direct method, either on the face of the statement or in a separate schedule?
   a. The major classes of gross cash receipts and gross cash payments.
   b. The amount of income taxes paid.
   c. A reconciliation of net income to net cash flows from operations.
   d. A reconciliation of ending retained earnings to net cash flows from operations.

28. In its 1996 income statement, Kilm Co. reported cost of goods sold of $450,000. Changes occurred in several balance sheet accounts as follows:

   - Inventory $160,000 decrease
   - Accounts payable - suppliers 40,000 decrease

   What amount should Kilm report as cash paid to suppliers in its 1996 cash flow statement, prepared under the direct method?
   a. $250,000
   b. $330,000
   c. $570,000
   d. $650,000

FINANCIAL STATEMENT ANALYSIS

29. What effect would the sale of a company's trading securities at their carrying amounts for cash have on each of the following ratios?

   - Current ratio
   - Quick ratio
   a. No effect No effect
   b. Increase Increase
   c. No effect Increase
   d. Increase No effect

30. At December 30, 1993, Vida Co. had cash of $200,000, a current ratio of 1.5:1 and a quick ratio of .5:1. On December 31, 1993, all cash was used to reduce accounts payable. How did these cash payments affect the ratios?

   - Current ratio
   - Quick ratio
   a. Increased Decreased
   b. Increased No effect
   c. Decreased Increased
   d. Decreased No effect

31. The following information pertains to Bala Co. for the year ended December 31, 1991:

<table>
<thead>
<tr>
<th>Sales</th>
<th>$600,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>100,000</td>
</tr>
<tr>
<td>Capital investment</td>
<td>400,000</td>
</tr>
</tbody>
</table>

   Which of the following equations should be used to compute Bala's return on investment?
   a. (4/6) x (6/1) = ROI
   b. (6/4) x (1/6) = ROI
   c. (4/6) x (1/6) = ROI
   d. (6/4) x (6/1) = ROI

32. In analyzing a company's financial statements, which financial statement would a potential investor primarily use to assess the company's liquidity and financial flexibility?
   b. Income statement.
   c. Statement of retained earnings.
   d. Statement of cash flows.

Items 33 and 34 are based on the following:

At December 31, 1992, Curry Co. had the following balances in selected asset accounts:

<table>
<thead>
<tr>
<th></th>
<th>1992</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$300</td>
<td>$100</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>1,200</td>
<td>400</td>
</tr>
<tr>
<td>Inventory</td>
<td>500</td>
<td>200</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>100</td>
<td>40</td>
</tr>
<tr>
<td>Other assets</td>
<td>400</td>
<td>150</td>
</tr>
<tr>
<td>Total assets</td>
<td>$2,600</td>
<td>$890</td>
</tr>
</tbody>
</table>

Curry also had current liabilities of $1,000 at December 31, 1992, and net credit sales of $7,200 for the year then ended.

33. What is Curry's acid-test ratio at December 31, 1992?
   a. 1.5
   b. 1.6
   c. 2.0
   d. 2.1
34. What was the average number of days to collect Curry's accounts receivable during 1992?
   a. 30.4
   b. 40.6
   c. 50.7
   d. 60.8

Items 35 through 37 are based on the following:

Selected data pertaining to Lore Co. for the calendar year 1994 is as follows:

Net cash sales $3,000
Cost of goods sold 18,000
Inventory at beginning of year 6,000
Purchases 24,000
Accounts receivable at beginning of year 20,000
Accounts receivable at end of year 22,000

35. The accounts receivable turnover for 1994 was 5.0 times. What were Lore's 1994 net credit sales?
   a. $105,000
   b. $107,000
   c. $110,000
   d. $210,000

36. What was the inventory turnover for 1994?
   a. 1.2 times.
   b. 1.5 times.
   c. 2.0 times.
   d. 3.0 times.

37. Lore would use which of the following to determine the average days sales in inventory?

<table>
<thead>
<tr>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 365</td>
<td>Average inventory</td>
</tr>
<tr>
<td>b. 365</td>
<td>Inventory turnover</td>
</tr>
<tr>
<td>c. Average inventory</td>
<td>Sales divided by 3</td>
</tr>
<tr>
<td>d. Sales divided by 365</td>
<td>Inventory turnover</td>
</tr>
</tbody>
</table>

38. Selected information for 1999 for the Prince Company is as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of goods sold</td>
<td>$5,400,000</td>
</tr>
<tr>
<td>Average inventory</td>
<td>1,800,000</td>
</tr>
<tr>
<td>Net sales</td>
<td>7,200,000</td>
</tr>
<tr>
<td>Average receivables</td>
<td>960,000</td>
</tr>
<tr>
<td>Net income</td>
<td>720,000</td>
</tr>
</tbody>
</table>

Assuming a business year consisting of 360 days, what was the average number of days in the operating cycle for 1999?
   a. 72.
   b. 84.
   c. 144.
   d. 168.

39. A company's return on investment is the
   a. Profit margin percentage divided by the capital turnover.
   b. Profit margin percentage multiplied by the capital turnover.
   c. Capital turnover divided by invested capital.
   d. Capital turnover multiplied by invested capital.

40. How is the average inventory used in the calculation of each of the following?

<table>
<thead>
<tr>
<th>Acid test (quick ratio)</th>
<th>Inventory turnover rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Numerator</td>
</tr>
<tr>
<td>Numerator</td>
<td>Denominator</td>
</tr>
<tr>
<td>Not used</td>
<td>Denominator</td>
</tr>
<tr>
<td>Not used</td>
<td>Numerator</td>
</tr>
</tbody>
</table>

41. Zenk Co. wrote off obsolete inventory of $100,000 during 1991. What was the effect of this write-off on Zenk's ratio analysis?
   a. Decrease in current ratio but not in quick ratio.
   b. Decrease in quick ratio but not in current ratio.
   c. Increase in current ratio but not in quick ratio.
   d. Increase in quick ratio but not in current ratio.
42. Gil Corp. has current assets of $90,000 and current liabilities of $180,000. Which of the following transactions would improve Gil’s current ratio?
   a. Refinancing a $30,000 long-term mortgage with a short-term note.
   b. Purchasing $50,000 of merchandise inventory with a short-term account payable.
   c. Paying $20,000 of short-term accounts payable.
   d. Collecting $10,000 of short-term accounts receivable.

43. During 1989, Rand Co. purchased $960,000 of inventory. The cost of goods sold for 1989 was $900,000, and the ending inventory at December 31, 1989, was $180,000. What was the inventory turnover for 1989?
   a. 6.4
   b. 6.0
   c. 5.3
   d. 5.0

44. The following computations were made from Clay Co.’s 1991 books:
   Number of days' sales in inventory 61
   Number of days' sales in trade accounts receivable 33
   What was the number of days in Clay’s 1991 operating cycle?
   a. 33
   b. 47
   c. 61
   d. 94

45. Which combination of changes in asset turnover and income as a percentage of sales will maximize the return on investment?

<table>
<thead>
<tr>
<th>Asset turnover</th>
<th>Income as a percentage of sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Increase</td>
<td>Decrease</td>
</tr>
<tr>
<td>b. Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>c. Decrease</td>
<td>Increase</td>
</tr>
<tr>
<td>d. Decrease</td>
<td>Decrease</td>
</tr>
</tbody>
</table>

46. Are the following ratios useful in assessing the liquidity position of a company?

<table>
<thead>
<tr>
<th>Defensive-interval ratio</th>
<th>Return on stockholders' equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

47. On December 31, 1991, Northpark Co. collected a receivable due from a major customer. Which of the following ratios would be increased by this transaction?
   a. Inventory turnover ratio.
   b. Receivable turnover ratio.
   c. Current ratio.
   d. Quick ratio.

48. Successful use of leverage is evidenced by a
   a. Rate of return on investment greater than the rate of return on stockholders' equity.
   b. Rate of return on investment greater than the cost of debt.
   c. Rate of return on sales greater than the rate of return on stockholders' equity.
   d. Rate of return on sales greater than the cost of debt.

49. Barr Co. has total debt of $420,000 and stockholders' equity of $700,000. Barr is seeking capital to fund an expansion. Barr is planning to issue an additional $300,000 in common stock, and is negotiating with a bank to borrow additional funds. The bank is requiring a debt-to-equity ratio of .75. What is the maximum additional amount Barr will be able to borrow?
   a. $225,000
   b. $330,000
   c. $525,000
   d. $750,000

50. The following data pertain to Ruhl Corp.’s operations for the year ended December 31, 1989:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating income</td>
<td>$800,000</td>
</tr>
<tr>
<td>Interest expense</td>
<td>100,000</td>
</tr>
<tr>
<td>Income before income tax</td>
<td>700,000</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>210,000</td>
</tr>
<tr>
<td>Net income</td>
<td>$490,000</td>
</tr>
</tbody>
</table>

The times interest earned ratio is
   a. 8.0 to 1.
   b. 7.0 to 1.
   c. 5.6 to 1.
   d. 4.9 to 1.
51. Kline Co. had the following sales and accounts receivable balances at the end of the current year:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash sales</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Net credit sales</td>
<td>3,000,000</td>
</tr>
<tr>
<td>Net accounts receivable, 1/1</td>
<td>100,000</td>
</tr>
<tr>
<td>Net accounts receivable, 12/31</td>
<td>400,000</td>
</tr>
</tbody>
</table>

What is Kline’s average collection period for its accounts receivable?

- a. 48.10 days
- b. 30.0 days
- c. 22.5 days
- d. 12.0 days

52. North Bank is analyzing Belle Corp.’s financial statements for a possible extension of credit. Belle’s quick ratio is significantly better than the industry average. Which of the following factors should North consider as a possible limitation of using this ratio when evaluating Belle’s creditworthiness?

- a. Fluctuating market prices of short-term investments may adversely affect the ratio.
- b. Increasing market prices for Belle’s inventory may adversely affect the ratio.
- c. Belle may need to sell its available-for-sale investments to meet its current obligations.
- d. Belle may need to liquidate its inventory to meet its long-term obligations.

53. Trans Co. had the following balances at December 31, 1999:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash in checking account</td>
<td>$ 35,000</td>
</tr>
<tr>
<td>Cash in money market account</td>
<td>75,000</td>
</tr>
<tr>
<td>U.S. Treasury bill, purchased 11/1/99, maturing 1/31/2000</td>
<td>350,000</td>
</tr>
<tr>
<td>U.S. Treasury bill, purchased 12/1/99, maturing 3/31/2000</td>
<td>400,000</td>
</tr>
</tbody>
</table>

Tran’s policy is to treat as cash equivalents all highly liquid investments with a maturity of three months or less when purchased. What amount should Trans report as cash and cash equivalents in its December 31, 1999, balance sheet?

- a. $110,000
- b. $385,000
- c. $460,000
- d. $860,000

54. Inch Co. had the following balances at December 31, 1999:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash in checking account</td>
<td>$ 35,000</td>
</tr>
<tr>
<td>Cash in money market account</td>
<td>75,000</td>
</tr>
<tr>
<td>U.S. Treasury bill, purchased 12/1/99, maturing 2/28/00</td>
<td>200,000</td>
</tr>
<tr>
<td>U.S. Treasury bill, purchased 12/1/98, maturing 5/31/00</td>
<td>150,000</td>
</tr>
</tbody>
</table>

Inch’s policy is to treat as cash equivalents all highly liquid investments with a maturity of three months or less when purchased. What amount should Inch report as cash and cash equivalents in its December 31, 1999, balance sheet?

- a. $110,000
- b. $235,000
- c. $310,000
- d. $460,000

55. Which is the most appropriate financial statement to use to determine if a company obtained financing during a year by issuing debt or equity securities?

- a. Balance sheet
- b. Statement of cash flows
- c. Statement of changes in stockholders’ equity
- d. Income statement

56. Payne Co. prepares its statement of cash flows using the indirect method. Payne’s unamortized bond discount account decreased by $25,000 during the year. How should Payne report the change in unamortized bond discount in its statement of cash flows?

- a. As a financing cash inflow.
- b. As a financing cash outflow.
- c. As an addition to net income in the operating activities section.
- d. As a subtraction from net income in the operating activities section.

57. Which of the following items is included in the financing activities section of the statement of cash flows?

- a. Cash effects of transactions involving making and collecting loans
- b. Cash effects of acquiring and disposing of investments and property, plant, and equipment.
- c. Cash effects of transactions obtaining resources from owners and providing them with a return on their investment.
- d. Cash effects of transactions that enter into the determination of net income.
58. New England Co. had net cash provided by operating activities of $351,000; net cash used by investing activities of $420,000; and cash provided by financing activities of $250,000. New England’s cash balance was $27,000 on January 1. During the year, there was a sale of land that resulted in a gain of $25,000 and proceeds of $40,000 were received from the sale. What was New England’s cash balance at the end of the year?
   a. $27,000
   b. $40,000
   c. $208,000
   d. $248,000

59. TGR Enterprises provided the following information from its statement of financial position for the year ended December 31, year 1:

<table>
<thead>
<tr>
<th>January 1</th>
<th>December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash 10,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Accounts receivable 120,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Inventories 200,000</td>
<td>160,000</td>
</tr>
<tr>
<td>Prepaid expenses 20,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Accounts payable 175,000</td>
<td>120,000</td>
</tr>
<tr>
<td>Accrued liabilities 25,000</td>
<td>30,000</td>
</tr>
</tbody>
</table>

   TGR's sales and cost of sales for year 1 were $1,400,000 and $840,000, respectively. What is the accounts receivable turnover, in days.
   a. 26.1
   b. 28.7
   c. 31.3
   d. 41.7

60. The following information was taken from Baxter Department Store's financial statements:

<table>
<thead>
<tr>
<th>January 1</th>
<th>December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory at January 1 100,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Net sales 2,000,000</td>
<td>700,000</td>
</tr>
</tbody>
</table>

   What was Baxter's inventory turnover for the year ending December 31?
   a. 2.5
   b. 3.5
   c. 5
   d. 10

61. A company's year-end balance sheet is shown below:

   **Assets**
   - Cash $300,000
   - Accounts receivable 350,000
   - Inventory 600,000
   - Property, plant and equipment (net) 2,000,000
   **Total Assets** $3,250,000

   **Liabilities and Shareholder Equity**
   - Current liabilities $700,000
   - Long-term liabilities 600,000
   - Common stock 800,000
   - Retained earnings 1,150,000
   **Total Liabilities and Shareholder Equity** $3,250,000

   What is the current ratio as of December 31?
   a. 1.79
   b. 0.93
   c. 0.67
   d. 0.43

62. Redwood Co.'s financial statements had the following information at year end.

<table>
<thead>
<tr>
<th>January 1</th>
<th>December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash 60,000</td>
<td></td>
</tr>
<tr>
<td>Accounts receivable 180,000</td>
<td></td>
</tr>
<tr>
<td>Allowance for uncollectible accounts 8,000</td>
<td></td>
</tr>
<tr>
<td>Inventory 240,000</td>
<td></td>
</tr>
<tr>
<td>Short-term marketable securities 90,000</td>
<td></td>
</tr>
<tr>
<td>Prepaid rent 18,000</td>
<td></td>
</tr>
<tr>
<td>Current liabilities 400,000</td>
<td></td>
</tr>
<tr>
<td>Long-term debt 220,000</td>
<td></td>
</tr>
</tbody>
</table>

   What was Redwood's quick ratio?
   a. 0.81 to 1
   b. 0.83 to 1
   c. 0.94 to 1
   d. 1.46 to 1

63. Green Co. had the following equity transactions at December 31:

   - Cash proceeds from sale of investment in Blue Co.
     (carrying value - $60,000) $75,000
   - Dividends received on Grey Co. stock 10,500
   - Common stock purchased from Brown Co. 38,000

   What amount should Green recognize as net cash from investing activities in its statement of cash flows at December 31?
   a. $37,000
   b. $47,500
   c. $75,000
   d. $85,500
64. Tam Co. reported the following items in its year-end financial statements:
- Capital expenditures $1,000,000
- Capital lease payments 125,000
- Income taxes paid 325,000
- Dividends paid 200,000
- Net interest payments 220,000

What amount should Tam report as supplemental disclosures in its statement of cash flows prepared using the indirect method?
- a. $545,000
- b. $745,000
- c. $1,125,000
- d. $1,870,000

65. Baker Co. began its operations during the current year. The following is Baker's balance sheet at December 31:

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$192,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>82,000</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$274,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and stockholders' equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
</tr>
<tr>
<td>Common stock</td>
</tr>
<tr>
<td>Retained earnings</td>
</tr>
<tr>
<td><strong>Total liabilities and stockholders' equity</strong></td>
</tr>
</tbody>
</table>

Baker's net income for the current year was $78,000 and dividends of $28,000 were declared and paid. Common stock was issued for $200,000. What amount should Baker report as cash provided by operating activities in its statement of cash flows for the current year?
- a. $20,000
- b. $50,000
- c. $192,000
- d. $250,000

66. For the year ended December 31, Ion Corp. had cash inflows of $25,000 from the purchases, sales, and maturities of held-to-maturity securities and $40,000 from the purchases, sales, and maturities of available-for-sale securities. What amount of net cash from investing activities should Ion report in its cash flow statement?
- a. $0
- b. $25,000
- c. $40,000
- d. $65,000

---

**IFRS - Statement of Cash Flows**

67. XZY International reports its cash flows in three categories. What should those categories be?
- a. Operating, Investing and Financing activities
- b. Operating, Revenue, and Expensing activities
- c. Investing, Liabilities and Equity activities
- d. Operations, Liabilities and Equity activities

68. Under IFRS, the cash from operations must be reported using which of the following methods:
- a. Direct method only
- b. Either the indirect or direct method
- c. Indirect method only
- d. Working capital method

69. XYZ International received $60,000 interest on its investment in Pearson Bonds. The bonds were classified as available for sale. Under IFRS, how should this $60,000 be reported on the cash flow statement?
- a. Operating activities
- b. Financing activities
- c. Either operating or investing activities
- d. Either investing or financing activities

70. Smithfield International paid dividends of $200,000 to its shareholders in year 2. How should this dividend payment be reported on Smithfield's statement of cash flows?
- a. Operating activities
- b. Financing activities
- c. Either investing or financing activities
- d. Either operating or financing activities

71. Pearman International exchanges 10,000 shares of common stock for equipment valued at $80,000. How should this transaction be reported on the statement of cash flows under IFRS?
- a. Financing activity
- b. In the notes to the financial statement
- c. Investing activity
- d. Both investing and financing activity

72. Garland Johnson, President of Guilford International thinks that cash flows per share is an important numbers and asked if it is possible to present this number in the financial statements?
- a. Permissible under GAAP
- b. Permissible under IFRS
- c. Permissible under both IFRS and US GAAP
- d. Not permissible
Chapter Eight
Statement of Cash Flows and Financial Statement
Analysis Problems

NUMBER 1

Presented below are the balance sheets of Farrell Corporation as of December 31, 19X1, and 19X0, and the statement of income and retained earnings for the year ended December 31, 19X1.

Farrell Corporation
BALANCE SHEETS
December 31, 19X1 and 19X0

<table>
<thead>
<tr>
<th>Assets</th>
<th>19X1</th>
<th>19X0</th>
<th>Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$275,000</td>
<td>$180,000</td>
<td>$95,000</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>295,000</td>
<td>305,000</td>
<td>(10,000)</td>
</tr>
<tr>
<td>Inventories</td>
<td>549,000</td>
<td>431,000</td>
<td>118,000</td>
</tr>
<tr>
<td>Investment in Hall, Inc., at equity</td>
<td>73,000</td>
<td>60,000</td>
<td>13,000</td>
</tr>
<tr>
<td>Land</td>
<td>350,000</td>
<td>200,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Plant and equipment</td>
<td>624,000</td>
<td>606,000</td>
<td>18,000</td>
</tr>
<tr>
<td>Less accumulated depreciation</td>
<td>(139,000)</td>
<td>(107,000)</td>
<td>(32,000)</td>
</tr>
<tr>
<td>Patent</td>
<td>16,000</td>
<td>20,000</td>
<td>(4,000)</td>
</tr>
<tr>
<td>Total assets</td>
<td>$2,043,000</td>
<td>$1,695,000</td>
<td>$348,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and Stockholders' Equity</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>$504,000</td>
<td>$453,000</td>
<td>$51,000</td>
</tr>
<tr>
<td>Accrued expenses—Selling and Adm.</td>
<td>100,000</td>
<td>110,000</td>
<td>(10,000)</td>
</tr>
<tr>
<td>Note payable, long-term</td>
<td>150,000</td>
<td>—</td>
<td>150,000</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>160,000</td>
<td>210,000</td>
<td>(50,000)</td>
</tr>
<tr>
<td>Deferred income taxes</td>
<td>41,000</td>
<td>30,000</td>
<td>11,000</td>
</tr>
<tr>
<td>Common stock, par value $10</td>
<td>430,000</td>
<td>400,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>226,000</td>
<td>175,000</td>
<td>51,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>432,000</td>
<td>334,000</td>
<td>98,000</td>
</tr>
<tr>
<td>Treasury stock, at cost</td>
<td>—</td>
<td>(17,000)</td>
<td>17,000</td>
</tr>
<tr>
<td>Total liabilities and stockholders' equity</td>
<td>$2,043,000</td>
<td>$1,695,000</td>
<td>$348,000</td>
</tr>
</tbody>
</table>
Farrell Corporation

STATEMENT OF INCOME AND RETAINED EARNINGS

For the Year Ended December 31, 19X1

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>$1,950,000</td>
</tr>
<tr>
<td>Operating expenses:</td>
<td></td>
</tr>
<tr>
<td>Cost of sales</td>
<td>1,150,000</td>
</tr>
<tr>
<td>Selling and administrative expenses</td>
<td>505,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>53,000</td>
</tr>
<tr>
<td>Operating income</td>
<td>242,000</td>
</tr>
<tr>
<td>Other (income) expense:</td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>15,000</td>
</tr>
<tr>
<td>Equity in net income of Hall, Inc.</td>
<td>(13,000)</td>
</tr>
<tr>
<td>Loss on sale of equipment</td>
<td>5,000</td>
</tr>
<tr>
<td>Amortization of patent</td>
<td>4,000</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>231,000</td>
</tr>
<tr>
<td>Income taxes:</td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td>79,000</td>
</tr>
<tr>
<td>Deferred</td>
<td>11,000</td>
</tr>
<tr>
<td>Provision for income taxes</td>
<td>90,000</td>
</tr>
<tr>
<td>Net income</td>
<td>141,000</td>
</tr>
<tr>
<td>Retained earnings, January 1, 19X1</td>
<td>334,000</td>
</tr>
<tr>
<td>Income, December 31, 19X1</td>
<td>475,000</td>
</tr>
<tr>
<td>Cash dividends, paid August 14, 19X1</td>
<td>43,000</td>
</tr>
<tr>
<td>Retained earnings, December 31, 19X1</td>
<td>$432,000</td>
</tr>
</tbody>
</table>

Additional information:

- On January 2, 19X1, Farrell sold equipment costing $45,000, with a book value of $24,000, for $19,000 cash.
- On April 1, 19X1, Farrell issued 1,000 shares of common stock for $23,000 cash.
- On May 15, 19X1, Farrell sold all of its treasury stock for $25,000 cash.
- On June 1, 19X1, individuals holding $50,000 face value of Farrell's bonds exercised their conversion privilege. Each of the 50 bonds was converted into 40 shares of Farrell's common stock.
- On July 1, 19X1, Farrell purchased equipment for $63,000 cash.
- On December 31, 19X1, land with a fair market value of $150,000 was purchased through the issuance of a long-term note in the amount of $150,000. The note bears interest at the rate of 15% and is due on December 31, 19X6.
- Deferred income taxes represent timing differences relating to the use of accelerated depreciation methods for income tax reporting and the straight-line method for financial statement reporting.

Required:

Using the indirect method, prepare the statement of cash flows of Farrell Corporation for the year ended December 31, 19X1. Supplementary disclosures and schedules are not required.
The following is Omega Corp.’s comparative balance sheet accounts worksheet at December 31, 1992, and 1991, with a column showing the increase (decrease) from 1991 to 1992.

<table>
<thead>
<tr>
<th>Comparative balance sheet worksheet</th>
<th>1992</th>
<th>1991</th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 800,000</td>
<td>$ 700,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>1,128,000</td>
<td>1,168,000</td>
<td>(40,000)</td>
</tr>
<tr>
<td>Inventories</td>
<td>1,850,000</td>
<td>1,715,000</td>
<td>135,000</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>3,307,000</td>
<td>2,967,000</td>
<td>340,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(1,165,000)</td>
<td>(1,040,000)</td>
<td>(125,000)</td>
</tr>
<tr>
<td>Investment in Belle Co.</td>
<td>305,000</td>
<td>275,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Loan receivable</td>
<td>270,000</td>
<td>—</td>
<td>270,000</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$6,495,000</td>
<td>$5,785,000</td>
<td>$710,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$1,015,000</td>
<td>$ 955,000</td>
<td>$ 60,000</td>
</tr>
<tr>
<td>Income taxes payable</td>
<td>30,000</td>
<td>50,000</td>
<td>(20,000)</td>
</tr>
<tr>
<td>Dividends payable</td>
<td>80,000</td>
<td>90,000</td>
<td>(10,000)</td>
</tr>
<tr>
<td>Capital lease obligation</td>
<td>400,000</td>
<td>—</td>
<td>400,000</td>
</tr>
<tr>
<td>Capital stock, common, $1 par</td>
<td>500,000</td>
<td>500,000</td>
<td>—</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>1,500,000</td>
<td>1,500,000</td>
<td>—</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>2,970,000</td>
<td>2,690,000</td>
<td>280,000</td>
</tr>
<tr>
<td><strong>Total liabilities and stockholders’ equity</strong></td>
<td>$6,495,000</td>
<td>$5,785,000</td>
<td>$710,000</td>
</tr>
</tbody>
</table>

Additional information:
- On December 31, 1991, Omega acquired 25% of Belle Co.’s common stock for $275,000. On that date, the carrying value of Belle’s assets and liabilities, which approximated their fair values, was $1,100,000. Belle reported income of $120,000 for the year ended December 31, 1992. No dividend was paid on Belle’s common stock during the year.
- During 1992, Omega loaned $300,000 to Chase Co., an unrelated company. Chase made the first semi-annual principal repayment of $30,000, plus interest at 10%, on October 1, 1992.
- On January 2, 1992, Omega sold equipment costing $60,000, with a carrying amount of $35,000, for $40,000 cash.
- On December 31, 1992, Omega entered into a capital lease for an office building. The present value of the annual rental payments is $400,000, which equals the fair value of the building. Omega made the first rental payment of $60,000 when due on January 2, 1993.
- Net income for 1992 was $360,000.
- Omega declared and paid cash dividends for 1992 and 1991 as follows:

<table>
<thead>
<tr>
<th></th>
<th>1992</th>
<th>1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid</td>
<td>February 28, 1993</td>
<td>February 28, 1992</td>
</tr>
<tr>
<td>Amount</td>
<td>$80,000</td>
<td>$90,000</td>
</tr>
</tbody>
</table>

Required:
Prepare a statement of cash flows for Omega, Inc., for the year ended December 31, 1992, using the indirect method. Supplemental schedules and disclosures are not required. A worksheet is not required.
Presented below are the condensed statements of financial position of Linden Consulting Associates as of December 31, 1989 and 1988, and the condensed statement of income for the year ended December 31, 1989.

Linden Consulting Associates

CONDENSED STATEMENTS OF FINANCIAL POSITION
December 31, 1989 and 1988

<table>
<thead>
<tr>
<th>Assets</th>
<th>1989</th>
<th>1988</th>
<th>(decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$652,000</td>
<td>$280,000</td>
<td>$372,000</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>446,000</td>
<td>368,000</td>
<td>78,000</td>
</tr>
<tr>
<td>Investment in Zach, Inc., at equity</td>
<td>550,000</td>
<td>466,000</td>
<td>84,000</td>
</tr>
<tr>
<td>Property and equipment</td>
<td>1,270,000</td>
<td>1,100,000</td>
<td>170,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(190,000)</td>
<td>(130,000)</td>
<td>(60,000)</td>
</tr>
<tr>
<td>Excess of cost over book value of investment in Zach, Inc. (net)</td>
<td>152,000</td>
<td>156,000</td>
<td>(4,000)</td>
</tr>
<tr>
<td>Total assets</td>
<td>$2,880,000</td>
<td>$2,240,000</td>
<td>$640,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and Partners' Equity</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>$320,000</td>
<td>$270,000</td>
<td>$ 50,000</td>
</tr>
<tr>
<td>Mortgage payable</td>
<td>250,000</td>
<td>270,000</td>
<td>(20,000)</td>
</tr>
<tr>
<td>Partners' equity</td>
<td>2,310,000</td>
<td>1,700,000</td>
<td>610,000</td>
</tr>
<tr>
<td>Total liabilities and partners' equity</td>
<td>$2,880,000</td>
<td>$2,240,000</td>
<td>$640,000</td>
</tr>
</tbody>
</table>

Linden Consulting Associates

CONDENSED STATEMENT OF INCOME
For the Year Ended December 31, 1989

Fee revenue                                 $2,664,000
Operating expenses                          1,940,000
Operating income                            724,000
Equity in earnings of Zach, Inc. (net of $4,000 amortization of excess of cost over book value) | 176,000 |
Net income                                  $ 900,000
Additional information:

- On December 31, 1988, partners' capital and profit sharing percentages were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Capital</th>
<th>Profit sharing %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garr</td>
<td>$1,020,000</td>
<td>60%</td>
</tr>
<tr>
<td>Pat</td>
<td>680,000</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>$1,700,000</td>
<td></td>
</tr>
</tbody>
</table>

- On January 1, 1989, Garr and Pat admitted Scott to the partnership for a cash payment of $340,000 to Linden Consulting Associates as the agreed amount of Scott's beginning capital account. In addition, Scott paid a $50,000 cash bonus directly to Garr and Pat. This amount was divided $30,000 to Garr and $20,000 to Pat. The new profit sharing arrangement is as follows:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Garr</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Pat</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Scott</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

- On October 1, 1989, Linden purchased and paid for an office computer costing $170,000, including $15,000 for sales tax, delivery, and installation. There were no dispositions of property and equipment during 1989.

- Throughout 1989, Linden owned 25% of Zach, Inc.'s common stock. As a result of this ownership interest, Linden can exercise significant influence over Zach's operating and financial policies. During 1989, Zach paid dividends totaling $384,000 and reported net income of $720,000. Linden's 1989 amortization of excess of cost over book value in Zach was $4,000.

- Partners' drawings for 1989 were as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Garr</td>
<td>$280,000</td>
</tr>
<tr>
<td>Pat</td>
<td>200,000</td>
</tr>
<tr>
<td>Scott</td>
<td>150,000</td>
</tr>
<tr>
<td></td>
<td>$630,000</td>
</tr>
</tbody>
</table>

Required:

b. Prepare a reconciliation of net income to net cash provided by operating activities.
c. Prepare an analysis of changes in partners' capital accounts for the year ended December 31, 1989.
**NUMBER 4** ("Other Objective Answer Format")

Question Number 4(a) consists of 5 items. These items require numerical answers and selection of the proper cash flow category. **Answer all items.** Your grade will be based on the total number of correct answers.

Following are selected balance sheet accounts of Zach Corp. at December 31, 1991 and 1990, and the increases or decreases in each account from 1990 to 1991. Also presented is selected income statement information for the year ended December 31, 1991, and additional information.

<table>
<thead>
<tr>
<th>Selected balance sheet accounts</th>
<th>1991</th>
<th>1990</th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$34,000</td>
<td>$24,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Property, plant, and equipment</td>
<td>277,000</td>
<td>247,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(178,000)</td>
<td>(167,000)</td>
<td>(11,000)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and stockholders' equity:</th>
<th>1991</th>
<th>1990</th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonds payable</td>
<td>49,000</td>
<td>46,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Dividends payable</td>
<td>8,000</td>
<td>5,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Common stock, $1 par</td>
<td>22,000</td>
<td>19,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>9,000</td>
<td>3,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>104,000</td>
<td>91,000</td>
<td>13,000</td>
</tr>
</tbody>
</table>

**Selected income statement information for the year ended December 31, 1991**

- Sales revenue: $155,000
- Depreciation: 33,000
- Gain on sale of equipment: 13,000
- Net income: 28,000

**Additional information**

- Accounts receivable relate to sales of merchandise.
- During 1991, equipment costing $40,000 was sold for cash.
- During 1991, $20,000 of bonds payable were issued in exchange for property, plant, and equipment. There was no amortization of bond discount or premium.

**Required:**

Items A through E represent activities that will be reported in Zach's statement of cash flows for the year ended December 31, 1991. The following two responses are required for each item:

- Determine the amount that should be reported in Zach's 1991 statement of cash flows.
- Using the list below, determine the category in which the amount should be reported in the statement of cash flows.

**O. Operating activity**

**I. Investing activity**

**F. Financing activity**

**Items to be answered:**

- A. Cash collections from customers (direct method).
- B. Payments for purchase of property, plant, and equipment.
- C. Proceeds from sale of equipment.
- D. Cash dividends paid.
- E. Redemption of bonds payable.
NUMBER 5

Number 5 is based on the following information. It consists of items 1 through 6.

The following condensed trial balance of Probe Co., a publicly-held company, has been adjusted except for income tax expense.

**Probe Co.**

**CONDENSED TRIAL BALANCE**

<table>
<thead>
<tr>
<th></th>
<th>12/31/93</th>
<th>12/31/92</th>
<th>Net change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr. (Cr.)</td>
<td>Dr. (Cr.)</td>
<td>Dr. (Cr.)</td>
</tr>
<tr>
<td>Cash</td>
<td>$ 473,000</td>
<td>$ 817,000</td>
<td>$(344,000)</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>670,000</td>
<td>610,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Property, plant, and equipment</td>
<td>1,070,000</td>
<td>995,000</td>
<td>75,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(345,000)</td>
<td>(280,000)</td>
<td>(65,000)</td>
</tr>
<tr>
<td>Dividends payable</td>
<td>(25,000)</td>
<td>(10,000)</td>
<td>(15,000)</td>
</tr>
<tr>
<td>Income taxes payable</td>
<td>35,000</td>
<td>(150,000)</td>
<td>185,000</td>
</tr>
<tr>
<td>Deferred income tax liability</td>
<td>(42,000)</td>
<td>(42,000)</td>
<td>—</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>(500,000)</td>
<td>(1,000,000)</td>
<td>500,000</td>
</tr>
<tr>
<td>Unamortized premium on bonds</td>
<td>(71,000)</td>
<td>(150,000)</td>
<td>79,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>(350,000)</td>
<td>(150,000)</td>
<td>(200,000)</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>(430,000)</td>
<td>(375,000)</td>
<td>(55,000)</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>(185,000)</td>
<td>(265,000)</td>
<td>80,000</td>
</tr>
<tr>
<td>Sales</td>
<td>(2,420,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of sales</td>
<td>1,863,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling and administrative expenses</td>
<td>220,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest income</td>
<td>(14,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>46,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>88,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss on sale of equipment</td>
<td>7,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain on extinguishment of bonds</td>
<td>(90,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 300,000</td>
</tr>
</tbody>
</table>

**Additional information:**

- During 1993 equipment with an original cost of $50,000 was sold for cash, and equipment costing $125,000 was purchased.

- On January 1, 1993, bonds with a par value of $500,000 and related premium of $75,000 were redeemed. The $1,000 face value, 10% par bonds had been issued on January 1, 1984, to yield 8%. Interest is payable annually every December 31 through 2003.

- Probe's tax payments during 1993 were debited to Income Taxes Payable. Probe elected early adoption of Statement of Financial Accounting Standards No. 109, Accounting for Income Taxes, for the year ended December 31, 1992, and recorded a deferred income tax liability of $42,000 based on temporary differences of $120,000 and an enacted tax rate of 35%. Probe's 1993 financial statement income before income taxes was greater than its 1993 taxable income, due entirely to temporary differences, by $60,000. Probe's cumulative net taxable temporary differences at December 31, 1993, were $180,000. Probe's enacted tax rate for the current and future years is 30%.

- 60,000 shares of common stock, $2.50 par, were outstanding on December 31, 1992. Probe issued an additional 80,000 shares on April 1, 1993.

- There were no changes to retained earnings other than dividends declared.
**Required:**
For each transaction in **items 1 through 6**, the following **two** responses are required:

- Determine the amount to be reported in Probe's 1993 statement of cash flows prepared using the indirect method.

- Select from the list below where the specific item should be separately reported on the statement of cash flows prepared using the indirect method.

  O. Operating.
  I. Investing.
  F. Financing.
  S. Supplementary information.
  N. Not reported on Probe's statement of cash flows.

1. Cash paid for income taxes.
2. Cash paid for interest.
3. Redemption of bonds payable.
4. Issuance of common stock.
5. Cash dividends paid.
6. Proceeds from sale of equipment.

**NUMBER 6 ("Other Objective Answer Format")**

Question Number 6 consists of 6 items. Select the **best** answer for each item. **Answer all items.** Your grade will be based on the total number of correct answers.

**Items 1 through 6** are based on the following:

Daley, Inc., is consistently profitable. Daley’s normal financial statement relationships are as follows:

<table>
<thead>
<tr>
<th>I. Current ratio</th>
<th>3 to 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Inventory turnover</td>
<td>4 times</td>
</tr>
<tr>
<td>III. Total debt/total assets ratio</td>
<td>0.5 to 1</td>
</tr>
</tbody>
</table>

**Required:**
For items 1 through 6, determine whether each 1992 transaction or event increased, decreased, or had no effect on each of the 1992 ratios. For each ratio select only one of the three alternatives.

**Items to be answered:**
1. Daley issued a stock dividend.
2. Daley declared, but did not pay, a cash dividend.
3. Customers returned invoiced goods for which they had not paid.
4. Accounts payable were paid on December 31, 1992.
5. Daley recorded both as receivable from an insurance company and a loss from fire damage to a factory building.
6. Early in 1992, Daley increased the selling price of one of its products that had a demand in excess of capacity. The number of units sold in 1991 and 1992 was the same.
Chapter Eight
Solutions to Statement of Cash Flows and Financial Statement Analysis Questions

1. (c) Cash in checking account $350,000
   Cash in money market account $250,000
   U.S. Treasury bill purchased 12/1/92, maturing 2/28/93 (3 months) $800,000
   Cash and cash equivalents 12/31/92 $1,400,000

   Generally, only investments with original maturities (to the enterprise holding the investment) of three (3) months or less qualify as cash equivalents. Therefore, the treasury bills purchased 3/1/92, maturing 2/28/93, would not be included as cash equivalents at 12/31/92.

2. (d) Revenue $1,980,000
   Less increase in accounts receivable
   Balance 12/31/86 $415,000
   Balance 550,000
   (135,000)
   Cash receipts from customers $1,845,000

   If accounts receivable had been written off during the year, the beginning balance would have to be adjusted for the write-off before the change in accounts receivable was determined.

   The increase in the allowance account results from the current provision for bad debts expense and does not relate to the increase in receivables from unpaid revenues.

3. (c) Per FAS #95, cash flow per share shall not be reported in financial statements. Neither cash flow per share, nor any component thereof, is an acceptable alternative to net income or earnings per share as a measure of performance.

   Per FAS #95, noncash investing and financing activities that affect recognized assets or liabilities shall be reported in related disclosures (either narrative or summarized in a schedule).

4. (a) All choices will be adjustments to net earnings when converting to cash provided because they do not involve the use of cash. The amortization of premium on bonds payable was originally a credit (increase to net earnings); therefore it must be subtracted from net earnings to arrive at cash provided by operations. Answers (b)-(d) are all items that should be added to convert net earnings to cash provided.

5. (d) All interest paid to creditors, except amounts capitalized, are classified as cash flows from operating activities.

6. (c) A gain on the sale of equipment is a noncash credit to income, therefore, it is deducted from net income to determine net cash flow from operating activities. Furthermore, the sale of equipment is an investing activity, and the cash receipts from the sale would be classified as investing activities on the statement of cash flows.

7. (a) For transactions that are part cash and part noncash, only the cash portion is reported in the statement of cash flows. The related disclosures (of noncash investing and financing activities) should clearly describe the cash and noncash aspects of such transactions.

8. (c) The financing portion of this transaction is a noncash transaction and would only be reported in related disclosures (narrative or schedule). In subsequent periods, payments of the mortgage note payable would be classified as cash outflows for financing activities.
9. (c) Generally, investing activities relate to the acquisition and disposal of assets other than those directly related to the enterprise's operations (such as trade receivables, inventory and prepaid expenses). Answer (a) is incorrect, as operating activities generally involve producing and delivering goods and/or providing services to customers. Sale of productive assets would not constitute sales to customers. Answer (b) is incorrect, as financing activities relate to obtaining and settling equity and debt financing other than that directly related to the enterprise's operations (such as trade payables and accrued expenses) and providing a return on investment to owners (dividends). Interest paid to creditors (net of amounts capitalized) is classified as an operating activities cash flow. Answer (d) is incorrect, as it is not a classification of cash flow for the statement of cash flows.

10. (a) Dividends received from investments.
Dividends received from investments are classified as a cash flow from operating activities. Under the direct method of reporting cash flows from operating activities, major classes of operating cash receipts and payments are shown in the operating activities section of the statement of cash flows.

Answer (b) is incorrect because: 1) gains are not cash flows, and 2) proceeds from the sale of equipment would be classified as investing activities, not operating activities.

Answer (c) is incorrect because: 1) gains are not cash flows, and 2) the cash payment to retire debt would be classified as financing activities, not operating activities.

Answer (d) is incorrect, as a change in accounting method is not a cash flow item.

11. (d) $429,200. Collections from customers:
Sales $438,000
Less increase in accounts receivable:
Accounts receivable Jan. 1 $21,600
Accounts receivable Dec. 31 30,400
– 8,800
Cash collected from customers $429,200

As no accounts receivable were written off or recovered during the year, the increase in accounts receivable represents uncollected sales and the beginning balance of accounts receivable does not require adjustment for such events.

12. (c) $429,200. Collections from customers:
Sales $438,000
Less increase in accounts receivable:
Accounts receivable Jan. 1 $21,600
Accounts receivable Dec. 31 30,400
– 8,800
Cash collected from customers $429,200

13. (d) $75,700. Net cash provided by operating activities:
Net income $75,000
Adjustments to reconcile net income to net cash provided by operating activities:
Increase in accounts receivable ($11,500 – $14,500) – 3,000
Bad debt expense (increase in the allowance for uncollectible accounts, $400 – $500) + 100
Decrease in prepaid rent ($6,200 – $4,100) + 2,100
Increase in accounts payable ($9,700 – $11,200) + 1,500
Net cash provided by operating activities $75,700

The increase in accounts receivable attributed to uncollected sales.
The decrease in prepaid rent attributed to expense not requiring cash payment in the current period.
The increase in accounts payable attributed to purchases not requiring cash payment in the current period.
14. (c) Cash flow from operating activities:

Net income $690,000

Adjustments to reconcile net income to net cash provided by operating activities:

Depreciation * 250,000
Amortization of goodwill 10,000
Gain on sale of long-term investment (35,000)
Increase in inventory (80,000)
Increase in accounts payable and accrued liabilities 105,000

Net cash provided by operating activities $940,000

*There was no net change in accumulated depreciation; therefore, depreciation expense equaled the accumulated depreciation on the equipment sold of $250,000 ($400,000 cost - $150,000 carrying value).

15. (a) Cash flow from investing activities:

Purchase of short-term investments $(300,000)
Proceeds from sale of long-term investments 135,000
Purchase of plant assets (1,100,000)
Proceeds from sale of equipment 150,000

Net cash used in investing activities $(1,115,000)

Purchase of plant assets:

Net increase in plant assets $ 700,000
Add cost of equipment sold 400,000
Purchases of plant assets $1,100,000

16. (a) Cash flows from financing activities:

Proceeds from short-term debt $325,000
Proceeds from issuance of common stock 220,000
Dividends paid (240,000)

Net cash provided by financing activities $305,000

*Note that the total of the net cash provided by (used in) operating activities (#14), investing activities (#15) and financing activities (above) equals the net change in cash during the period.

Cash provided by (used in):

Operating activities $940,000
Investing activities (1,115,000)
Financing activities 305,000

Net increase in cash $130,000

17. (a) $170,000.

Proceeds from sale of equipment $10,000
Payment to acquire A.S. Inc. bonds (180,000)
Net cash used in investing activities $(170,000)

Gain on sale of equipment and amortization of bond discount are noncash items and would only be used to reconcile net income to net cash from operating activities.

18. (d) $37,000.

Payment at Dividends $(38,000)
Proceeds from sale of treasury stock 75,000
Net cash provided by Financing Activities 37,000

Declaration of dividends is not a cash flow item.
19. (c) Cash flows from investment activities
   Payment for purchase of real estate $(550,000)
   Proceeds from sale of investments 500,000
   Payment to acquire machinery and equipment (125,000)
   Net cash used in investing activities $(175,000)

20. (b) Cash flows from financing activities
   Proceeds from bank loan $550,000
   Payment of dividends (600,000)
   Proceeds from issuance of common stock 250,000
   Payment of bank loan (450,000)
   Net cash used in financing activities $(250,000)

Note: The reduction in accounts receivable and increase in accounts payable relate to operating activities.

21. (a) The write-off of accounts receivable is a non-cash decrease in accounts receivable. Therefore, the increase (decrease) in accounts receivable for the period does not represent the true uncollected sales (additional collections). The write-off, as a non-cash decrease in accounts receivable, would be deducted from sales to determine cash collections from customers. The increase in accounts receivable represents (results from) uncollected sales, and would be deducted from sales to determine cash collections from customers.

22. (c) $31,000 increase.
   Building cost $100,000
   Less accumulated depreciation - 48,000
   Book value $52,000
   Reported loss - 21,000
   Proceeds from insurance $31,000

23. (a) $717,000. Net cash used in financing activities:
   Payment for retirement of debt - $750,000
   Payment of cash dividend - 62,000
   Proceeds from sale of treasury stock + 95,000
   Net cash used in financing activities - $717,000

The conversion of preferred stock to common stock is a non-cash financing activity and would be disclosed in a related schedule or footnote.

24. (d) $41,000. Net cash used in investing activities:
   Payment for acquisition of investment in Maybel, Inc. - $26,000
   Proceeds from sale of investment in Rate Motors + 35,000
   Payment for acquisition of certificate of deposit - 50,000
   Net cash used in investing activities - $41,000

Collection of dividends on investments in stock ($12,000) is classified as a cash flow from operating activities (dividend income).

25. (d) On the statement of cash flows, the amounts reported as investing activities reflect the actual inflows and outflows of cash. The amount of the note issued is reflected as a non-cash significant investing and financing activity in a separate notation or schedule.

26. (d) The U.S. Treasury bills qualify as cash equivalents. As such, they are part of the change (cash and cash equivalents) being explained by the statement and are not operating, investing or financing cash flows which explain the change.
27. (d) The cash flow statement prepared under the direct method would include the major classes of gross cash receipts and payments, and the cash payments would include the amount of income taxes paid. A unique feature of the direct method is that it requires a supplemental schedule showing a reconciliation of net income to net cash from operating activities (the indirect method).

Neither the direct nor indirect method requires a reconciliation of ending retained earnings to net cash flow from operations.

28. (b) $330,000.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of goods sold</td>
<td>$450,000</td>
</tr>
<tr>
<td>Less decrease in inventory</td>
<td>$160,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>$290,000</td>
</tr>
<tr>
<td>Add decrease in A/P - suppliers</td>
<td>$40,000</td>
</tr>
<tr>
<td>Payments to suppliers</td>
<td>$330,000</td>
</tr>
</tbody>
</table>

The decrease in inventory is included in cost of goods sold; however, was not purchased during the current period. The decrease in accounts payable - suppliers results from payments to suppliers in excess of current period purchases.

29. (a) The sale of trading securities at their carrying amounts for cash would not effect either the current ratio or the quick ratio. Neither current assets nor quick assets (cash + marketable securities + S.T. receivables) would be affected by the sale as both trading securities and cash are current and quick assets, and the sale was at carrying value (no gain or loss).

30. (a) Current ratio -- increased; Quick ratio -- decreased.

Current ratio = Current assets ÷ Current liabilities. When the current ratio is greater than 1 to 1, an equal decrease in current assets and current liabilities will result in an increase in the current ratio. The decrease in current liabilities (the smaller number) is proportionately greater than the decrease in current assets, resulting in an increase in the ratio.

Quick ratio = Cash + Mkt. Sec. + Rec. / Current liabilities. When the quick ratio is less than 1:1, an equal decrease in quick assets and current liabilities will result in a decrease in the ratio. The decrease in current liabilities (the larger number) is proportionately smaller than the decrease in quick assets, resulting in a decrease in the ratio.

31. (b) (6/4) x (1/6) = ROI.

Rate of return in investment = Turnover x margin
Turnover = Sales/Investment (assets) = 600,000/400,000 = 6/4
Margin = Net income/Sales = 100,000/600,000 = 1/6
ROI = (6/4) x (1/6)

32. (a) Per FASB Concept #5, the balance sheet is intended to help external users to assess a company's liquidity, financial flexibility, and operating capability. Liquidity is used to describe the amount of time until an asset is converted into cash or a liability is paid. Financial flexibility refers to a company's ability to use its financial resources to adapt to change.

33. (a) Acid-test (quick) ratio = \[
\frac{\text{Cash + marketable securities + accounts receivable}}{\text{Current liabilities}}
\]
   = \[
\frac{300 + 1200}{1000}
\]
   = 1.5

8S-5
34. (c) Daily credit sales = \( \frac{\text{Credit sales}}{365} = \frac{7200}{365} = 19.72 \)

Average accounts receivable = \( \frac{\text{Beginning balance} + \text{ending balance}}{2} \)

\[ = \frac{800 + 1200}{2} = \frac{2000}{2} = 1000 \]

Days sales in accounts receivable = \( \frac{\text{Average accounts receivable}}{\text{Daily credit sales}} \)

\[ = \frac{1000}{19.72} = 50.7 \]

Alternative computation:

Accounts receivable turnover = \( \frac{\text{Credit sales}}{\text{Average accounts receivable}} \)

\[ = \frac{7200}{1000} = 7.2 \text{ times} \]

Days sales in accounts receivable = \( \frac{365}{\text{Accounts receivable turnover}} \)

\[ = \frac{365}{7.2} = 50.7 \]

35. (a) $105,000.

\[ \text{Accounts Receivable Turnover} = \frac{\text{Credit sales}}{\text{Average Accts Receivable}} \]

\[ 5.0 = \frac{\text{Credit sales}}{21,000} \]

\[ 5.0 \times 21,000 = \text{Credit sales} \]

\[ 105,000 = \text{Credit sales} \]

Average Accounts Receivable = \( \frac{\text{Beginning balance} + \text{Ending balance}}{2} \)

\[ = \frac{20,000 + 22,000}{2} = \frac{42,000}{2} = 21,000 \]
Inventory Turnover = Cost of Goods Sold / Average Inventory

= $18,000 / $9,000

= 2.0 times

Average inventory = (Beginning Balance + Ending Balance) / 2

= ($6,000 + $12,000) / 2

= $9,000

Ending inventory:

Beginning inventory: $6,000

+ Purchases: 24,000

Cost of goods available for sale: 30,000

- Cost of goods sold: (18,000)

Ending inventory: 12,000

Average days sales in inventory =

365 Days (in year)

Times Inventory Turnover (in year)

or

Average Inventory

Average daily cost of goods sold

The average number of days in the operating cycle is equal to the average number of days in the inventory -- cost of goods sold cycle plus the average number of days in the accounts receivable-sales cycle.

Average daily CGS = CGS / 360 = 5,400,000 / 360 = 15,000/day

Average daily sales = sales / 360 = 7,200,000 / 360 = 20,000/day

Day's sales in inventory = av. inv. / CGS/day = 1,800,000 / 15,000 = 120 days

+ day's sales in accts. rec. = av. A.R. / sales/day = 960,000 / 20,000 = 48 days

168 days

Rate of return on investment (or asset) can be broken down to its component margin and turnover. An increase (decrease) in either will result in an increase (decrease) in the R.O.I. The relationship of R.O.I. , margin and turnover is as follows:

R.O.I. = (Margin) x (Turnover)

Net income / Investment = Net income / Sales x Sales / Investment

The acid test or quick ratio is equal to cash + marketable securities + receivables divided by current liabilities, or current assets minus inventory divided by current liabilities. Neither average inventory nor inventory is used in the computation of this ratio.

The inventory is equal to cost of goods sold divided by average inventory.
41. (a) Current ratio  = \( \frac{\text{Current assets}}{\text{Current liabilities}} \)

Quick (acid test) ratio  = \( \frac{\text{Cash} + \text{ Marketable securities} + \text{Receivables}}{\text{Current liabilities}} \)

or

\( = \frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}} \)

As inventory is excluded in the quick ratio, the write-off of obsolete inventory would have no effect on the quick ratio; however, it would decrease the current ratio as the write-off would reduce current assets.

42. b) The current ratio is equal to current assets divided by current liabilities. Any transaction which will increase current assets proportionately more than current liabilities or decrease current liabilities proportionately more than current assets will increase the current ratio.

Purchasing $50,000 of inventory with a short-term account payable will increase both current assets and current liabilities by $50,000. However, because the current ratio is less than 1 to 1, the purchase will increase current assets proportionately more than current liabilities, and increase the current ratio.

Answer (a) is incorrect as it will increase only current liabilities, decreasing the current ratio. Answer (c) is incorrect as it will decrease current assets proportionately more than current liabilities, decreasing the current ratio. Answer (d) is incorrect as it will not affect either current assets or current liabilities. Therefore, the current ratio will be unchanged.

43. (b) 6.0 (times).

\[
\text{Inventory turnover} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}
\]

\[
= \frac{900,000}{150,000}
\]

\[
= 6.0 \text{ times}
\]

\[
\text{Average inventory} = \frac{\text{Beginning} + \text{ending balance}}{2}
\]

\[
= \frac{120,000 + 180,000}{2}
\]

\[
= 150,000
\]

Computation of beginning inventory:

\[
\begin{align*}
\text{Cost of goods sold} & \quad 900,000 \\
\text{+ Ending inventory} & \quad 180,000 \\
\text{Cost of goods available for sale} & \quad 1,080,000 \\
\text{- Purchases} & \quad -960,000 \\
\text{Beginning inventory} & \quad 120,000
\end{align*}
\]

Alternative: If purchases were $960,000 and cost of goods sold were $900,000, inventory increased $60,000. Beginning inventory would equal the ending inventory of $180,000 less the increase of $60,000, or $120,000.

44. (d) 94 days.

The operating cycle is the average time for a company to expend cash for inventory, process and sell the inventory, and collect the resulting receivables, converting them back into cash. The number of days in the operating cycle (94) is equal to the number of days' sales in inventory (61), plus the number of days' sales in accounts receivable (33).
45. (b) The rate of return on investment (assets) can be broken down to its components margin (income as a percentage of sales) and asset turnover. An increase (decrease) in either will result in an increase (decrease) in rate of return on investment (ROI). The relationship of ROI, margin and turnover is as follows:

\[
\text{ROI} = \frac{\text{Net Income}}{\text{Investment (Assets)}} = \left( \frac{\text{Net income}}{\text{Sales}} \right) \times \left( \frac{\text{Sales}}{\text{Investment (Assets)}} \right)
\]

46. (b) The defensive - interval ratio is a measure of liquidity, the entities' ability to meet operating cash needs without external cash flows.

\[
\text{Defensive-interval} = \frac{\text{Cash} + \text{S.T. Mk. Sec.} + \text{S.T. Rec.}}{\text{Aver. daily expenditures for operations}}
\]

The rate of return on stockholders' equity is a measure of profitability (to the owners).

47. (b) Receivable turnover ratio.
Accounts receivable turnover = Sales/Average accounts receivable.
Collection of accounts receivable would reduce the accounts receivable balance and, thereby, the average accounts receivable which would result in an increase in the accounts receivable turnover.

48. (b) Leverage (financial) results from the use of fixed cost debt securities in the capital structure of an entity. Successful use of leverage (favorable leverage) results when invested funds earn more than the cost of borrowing the funds.

49. (b) $330,000.

\[
\begin{align*}
\text{Current stockholders' equity} & = \$700,000 \\
\text{Planned issuance of stock} & = 300,000 \\
\text{Planned stockholders' equity} & = 1,000,000 \\
\text{Debt-equity ratio} & = \frac{\text{Debt}}{\text{Equity}} \\
.75 & = \frac{\text{Debt}}{1,000,000} \\
\text{Debt} & = \$750,000 \\
\text{Maximum allowable debt} & = \$750,000 \\
\text{Current debt} & = 420,000 \\
\text{Maximum additional debt} & = \$330,000
\end{align*}
\]

50. (a) Times interest earned = \( \frac{\text{Net income before interest and taxes}}{\text{Interest expense}} \)

\[
= \frac{\$800,000}{\$100,000} = 8 \text{ or } 8 \text{ to } 1
\]

51. (b) The average collection period is the average receivables divided by the average sales per day.

The average receivables is the beginning receivables plus the ending receivables divided by two:
\( \frac{\$100,000 + \$400,000}{2} = \$250,000 \)

The average sales per day is the credit sales divided by 360 days:
\( \frac{\$3,000,000}{360} = \$8,333 \) per day.

Therefore, average collection period is $250,000 divided by $8,333 per day which equals 30 days.
52. (a) The quick ratio includes the current assets that can be “quickly” converted to cash such as cash, marketable securities and receivables. Therefore, fluctuating market prices for short-term investments (marketable securities) may adversely affect the ratio. Answers B and D are incorrect because inventory is not included in the Quick Ratio. Answer C is incorrect because Available-For-Sale securities may be either current or non-current assets.

53. (c) Cash and Cash Equivalents should include cash in the checking account, the money market account, and the U.S. Treasury bill purchased 1/1/99. ($35,000 + $75,000 + $350,000 = $460,000). The 1st Treasury bill has a maturity from the purchase date of three months which meets the Travis Co. definition of a cash equivalent. The second Treasury bill has a maturity of four months and would not be considered a cash equivalent.

54. (c) Cash equivalents are the cash in the checking account ($35,000), the cash in the money market account ($75,000) and the Treasury bill that has a maturity of three months from the purchase date ($200,000) for a total of $310,000. The $150,000 Treasury bill is not a cash equivalent because the maturity date is six months from the purchase date.

55. (b) The cash from financing activities section of the cash flow statement would show any cash received from issuing debt or equity securities.

56. (c) The amortization of a bond discount is a decrease in the bond discount and an increase in cash from operation.

<table>
<thead>
<tr>
<th>Cash from operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income</td>
</tr>
<tr>
<td>Amtz of Bond Discount</td>
</tr>
</tbody>
</table>

57. (c) Cash effects of transaction obtaining resources from owners and providing them with a return on their investments would be shown in the Financing activities section of the statement of cash flows. Financing activities involve changes in liabilities and stockholders equity. So in this example an issue of common stock for cash would be financing activity. Investing activities involve changes in Assets so answers A & B would be investing activities. Answer D would be a part of cash from operations.

58. (c) Cash from operating activities $351,000
Less cash from investing activities (420,000)
plus Cash from financing activities 250,000
Equals change in cash 181,000
plus cash on January 1 27,000
Ending Balance in Cash 208,000

Note: The land transaction is already included in the above balances.
59. (b) The accounts receivable turnover in days is the average accounts receivable $110,000 divided by the average sales per day of $3,835.62 which equals 28.7 days rounded. The average accounts receivable is the beginning A/R of $120,000 plus the ending A/R of $100,000 for a total of $220,000 divided by 2 equals $110,000. The average sales per day is the total sales of $1,400,000 divided by 365 days for an average of $3,835.62.

60. (a) The formula for inventory turnover is the cost of goods sold of $500,000 divided by the average inventory of $200,000 for a turnover of 2.5. The average inventory is the beginning inventory of $100,000 plus the ending inventory of $300,000 for a total of $400,000 divided by 2 for an average of $200,000. The cost of goods sold is the beginning inventory of $100,000 plus purchases of $700,000 which equals $800,000 available for sale less the ending inventory of $300,000 for a total of $500,000.

61. (a) The current ratio is current assets divided by current liabilities. Current assets are cash, $300,000, accounts receivable, $350,000, and inventory of $600,000 for total current assets of $1,250,000 divided by current liabilities of $700,000 for a current ratio of 1.79 rounded.

62. (a) The formula for the quick ratio is the quick assets divided by the current liabilities. The quick assets are assets that can be quickly converted to cash. The quick assets in this question are cash of $60,000, net accounts receivable of $172,000 ($180,000-$8,000) plus short-term marketable securities of $90,000 for a total quick assets of $322,000 divided by the current liabilities of $400,000 for a quick ratio of 0.81 to 1.

63. (a) The cash proceeds from sale of investment in Blue Co. would increase cash from investing activities by $75,000 less the common stock purchases from Brown Co. would decrease investment activities by $38,000 for a net of $37,000. The gain on the sale of the investment in Blue Co. $15,000 and the dividends received from Gray Co. stock would be a part of cash from operations under the indirect method.

64. (a) The two supplemental disclosures in a statement of cash flows using the indirect method are income taxes paid ($325,000) and net interest payments ($220,000) for a total of $545,000.

65. (a) Cash from operations would be the net income of $78,000 less the increase in accounts receivable of $82,000 plus the increase in accounts payable of $24,000 for a net total of $20,000. The dividends and common stock issued are financing activities.

66. (d) The cash inflows from activities in held-to-maturity securities ($25,000) plus the cash inflows from the activities in available-for-sale securities ($40,000) equals $65,000 in cash inflows from investing activities.

67. (a) Under IFRS, the cash flow statement must show cash from operating, investing and financing activities.

68. (b) Under IFRS the cash from operation may be reported under either the direct or indirect method.

69. (c) IFRS allows interest income to be classified as either operating or investing activities. The classification of available for sale did not affect the problem.

70. (d) Dividends paid by Smithfield may be classified as either operating or financing activities.

71. (b) Since this is a significant non cash exchange, it should be disclosed in the notes to the financial statements. Since this a non cash transaction, it would not be reported under investing or financing activities.

72. (b) The presentation of cash flow per share is allowed under IFRS but not under US GAAP.
# Chapter Eight
## Solutions to Statement of Cash Flows Problems

### NUMBER 1

Farrell Corporation  

**STATEMENT OF CASH FLOWS WORKSHEET**  
For the Year Ended December 31, 19X1  
(Not Required)

<table>
<thead>
<tr>
<th>Assets</th>
<th>19X0</th>
<th>Dr.</th>
<th>Cr.</th>
<th>19X1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$180,000</td>
<td>(x)</td>
<td>$95,000</td>
<td>$275,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>305,000</td>
<td>(7)</td>
<td>10,000</td>
<td>295,000</td>
</tr>
<tr>
<td>Inventories</td>
<td>431,000</td>
<td>(8)</td>
<td>118,000</td>
<td>549,000</td>
</tr>
<tr>
<td>Investment in Hall, Inc.</td>
<td>60,000</td>
<td>(5)</td>
<td>13,000</td>
<td>73,000</td>
</tr>
<tr>
<td>Land</td>
<td>200,000</td>
<td>(10)</td>
<td>150,000</td>
<td>350,000</td>
</tr>
<tr>
<td>Plant and equipment</td>
<td>606,000</td>
<td>(15)</td>
<td>63,000</td>
<td>624,000</td>
</tr>
<tr>
<td>Less accumulated depreciation</td>
<td>(107,000)</td>
<td>(4)</td>
<td>21,000</td>
<td>(139,000)</td>
</tr>
<tr>
<td>Patent</td>
<td>20,000</td>
<td>(3)</td>
<td>4,000</td>
<td>16,000</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$1,695,000</td>
<td></td>
<td>$2,043,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and stockholders’ equity</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>$563,000</td>
<td>(9)</td>
<td>41,000</td>
</tr>
<tr>
<td>Note payable, long-term</td>
<td>—</td>
<td>(10)</td>
<td>150,000</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>210,000</td>
<td>(12)</td>
<td>50,000</td>
</tr>
<tr>
<td>Deferred income taxes</td>
<td>30,000</td>
<td>(6)</td>
<td>11,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>400,000</td>
<td>(11)</td>
<td>10,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>175,000</td>
<td>(11)</td>
<td>13,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>334,000</td>
<td>(14)</td>
<td>43,000</td>
</tr>
<tr>
<td>Treasury stock</td>
<td>(17,000)</td>
<td>(13)</td>
<td>17,000</td>
</tr>
<tr>
<td><strong>Total liabilities and equity</strong></td>
<td>$1,695,000</td>
<td>$553,000</td>
<td>$2,043,000</td>
</tr>
</tbody>
</table>

**Cash flows from operating activities:**

<table>
<thead>
<tr>
<th>Description</th>
<th>19X0</th>
<th>Dr.</th>
<th>Cr.</th>
<th>19X1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income</td>
<td>$141,000</td>
<td></td>
<td></td>
<td>$141,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>53,000</td>
<td></td>
<td></td>
<td>53,000</td>
</tr>
<tr>
<td>Amortization of patent</td>
<td>4,000</td>
<td></td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td>Loss on sale of equipment</td>
<td>5,000</td>
<td></td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td>Equity in net income of Hall, Inc.</td>
<td>13,000</td>
<td></td>
<td></td>
<td>13,000</td>
</tr>
<tr>
<td>Deferred income taxes</td>
<td>11,000</td>
<td></td>
<td></td>
<td>11,000</td>
</tr>
<tr>
<td>Decrease in inventories</td>
<td>10,000</td>
<td></td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>Increase in inventories</td>
<td>118,000</td>
<td></td>
<td></td>
<td>118,000</td>
</tr>
<tr>
<td>Increase in accounts payable and accrued expenses</td>
<td>41,000</td>
<td></td>
<td></td>
<td>41,000</td>
</tr>
</tbody>
</table>

**Cash flows from investing activities:**

<table>
<thead>
<tr>
<th>Description</th>
<th>19X0</th>
<th>Dr.</th>
<th>Cr.</th>
<th>19X1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale of equipment</td>
<td>19,000</td>
<td></td>
<td></td>
<td>19,000</td>
</tr>
<tr>
<td>Purchase of equipment</td>
<td>63,000</td>
<td></td>
<td></td>
<td>63,000</td>
</tr>
</tbody>
</table>

**Cash flows from financing activities:**

<table>
<thead>
<tr>
<th>Description</th>
<th>19X0</th>
<th>Dr.</th>
<th>Cr.</th>
<th>19X1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale of common stock</td>
<td>23,000</td>
<td></td>
<td></td>
<td>23,000</td>
</tr>
<tr>
<td>Sale of treasury stock</td>
<td>25,000</td>
<td></td>
<td></td>
<td>25,000</td>
</tr>
<tr>
<td>Cash dividends</td>
<td>43,000</td>
<td></td>
<td></td>
<td>43,000</td>
</tr>
</tbody>
</table>

**Noncash investing and financing activities:**

<table>
<thead>
<tr>
<th>Description</th>
<th>19X0</th>
<th>Dr.</th>
<th>Cr.</th>
<th>19X1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issuance of note payable to purchase land</td>
<td>150,000</td>
<td></td>
<td></td>
<td>150,000</td>
</tr>
<tr>
<td>Purchase of land by issuance of note payable</td>
<td>150,000</td>
<td></td>
<td></td>
<td>150,000</td>
</tr>
<tr>
<td>Issuance of common stock to convert bonds</td>
<td>50,000</td>
<td></td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td>Conversion of bonds to common stock</td>
<td>50,000</td>
<td></td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td><strong>Net increase in cash</strong></td>
<td>$532,000</td>
<td></td>
<td></td>
<td>$532,000</td>
</tr>
</tbody>
</table>
Farrell Corporation
STATEMENT OF CASH FLOWS
For the Year Ended December 31, 19X1

Cash flow from operating activities:
   Net income $141,000
   Adjustments to reconcile net income to
   net cash provided by operating activities:
     Depreciation 53,000
     Amortization of patent 4,000
     Loss on sale of equipment 5,000
     Undistributed earnings of Hall, Inc. (13,000)
     Increase in deferred income taxes 11,000
     Decrease in accounts receivable 10,000
     Increase in inventories (118,000)
     Increase in accounts payable and accrued expenses 41,000
     Net cash provided by operating activities $134,000

Cash flows from investing activities:
   Proceeds from sale of equipment $ 19,000
   Payments to acquire equipment (63,000)
   Net cash used in investing activities (44,000)

Cash flows from financing activities:
   Proceeds from issuance of common stock $ 23,000
   Proceeds from sale of treasury stock 25,000
   Dividends paid (43,000)
   Net cash provided by financing activities 5,000

Net increase in cash $ 95,000

Cash, January 1, 19X1 180,000

Cash, December 31, 19X1 $275,000
NUMBER 2

Omega Corp.

STATEMENT OF CASH FLOWS
For the Year Ended December 31, 1992

Cash flows from operating activities:

Net income $360,000

Adjustments to reconcile net income to
net cash provided by operating activities:

Depreciation $150,000 [1]
Gain on sale of equipment (5,000) [2]
Undistributed earnings of Belle Co. (30,000) [3]

Changes in assets and liabilities:
Decrease in accounts receivable 40,000
Increase in inventories (135,000)
Increase in accounts payable 60,000
Decrease in income taxes payable (20,000)

Net cash provided by operating activities 420,000

Cash flows from investing activities:
Proceeds from sale of equipment 40,000
Loan to Chase Co. (300,000)
Principal payment of loan receivable 30,000

Net cash used in investing activities (230,000)

Cash flows from financing activities:
Dividends paid (90,000)

Net cash used in financing activities (90,000)

Net increase in cash 100,000
Cash at beginning of year 700,000
Cash at end of year $800,000

Explanation of Amounts:

[1] Depreciation
Net increase in accumulated depreciation for the year ended December 31, 1992 $125,000
Accumulated depreciation on equipment sold:
Cost $60,000
Carrying value 35,000
Depreciation for 1992 $150,000

[2] Gain on sale of equipment
Proceeds $40,000
Carrying value 35,000
Gain $5,000

Belle’s net income for 1992 $120,000
Omega’s ownership 25%
Undistributed earnings of Belle Co. $30,000
Linden Consulting Associates

STATEMENT OF CASH FLOWS
For the Year Ended December 31, 1989

Increase (Decrease) in Cash

Cash flows from operating activities:
- Cash received from customers $2,586,000 [1]
- Cash paid to suppliers and employees (1,830,000) [2]
- Dividends received from affiliate 96,000
  Net cash provided by operating activities $  852,000

Cash flows from investing activities:
- Purchased property and equipment (170,000)

Cash flows from financing activities:
- Principal payment of mortgage payable (20,000)
- Proceeds for admission of new partner 340,000
- Drawings against partners' capital accounts (630,000)
  Net cash used in financing activities (310,000)

Net increase in cash 372,000
Cash at beginning of year 280,000
Cash at end of year $  652,000

Explanation of amounts:

[1] Fee revenue $2,664,000
  Less ending accounts receivable balance (446,000)
  Add beginning accounts receivable balance 368,000
  $2,586,000

[2] Operating expenses $1,940,000
  Less: Depreciation $ 60,000
    Ending accounts payable balance 320,000
  Add beginning accounts payable balance 270,000
  $1,830,000

b.
Reconciliation of net income to net cash provided by operating activities:

Net income $900,000

Adjustments to reconcile net income to net cash provided by operating activities:
- Depreciation and amortization $64,000
- Undistributed earnings of affiliate (84,000) [1]
- Change in assets and liabilities:
  Increase in accounts receivable (78,000)
  Increase in accounts payable and accrued expenses 50,000
  Total adjustments (48,000)

Net cash provided by operating activities $852,000

[1] Linden's share of Zach, Inc.'s:
  Reported net income for 1989 (25% × $720,000) $180,000
  Cash dividends paid for 1989 (25% × $384,000) 96,000
  Undistributed earnings for 1989 $  84,000
### Analysis of Changes in Partners' Capital Accounts

**For the Year Ended December 31, 1989**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Garr</th>
<th>Pat</th>
<th>Scott</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, December 31, 1988</td>
<td>$1,700,000</td>
<td>$1,020,000</td>
<td>$680,000</td>
<td>$</td>
</tr>
<tr>
<td>Capital investment</td>
<td>340,000</td>
<td>—</td>
<td>—</td>
<td>340,000</td>
</tr>
<tr>
<td>Allocation of net income</td>
<td>900,000</td>
<td>450,000</td>
<td>270,000</td>
<td>180,000</td>
</tr>
<tr>
<td>Balance before drawings</td>
<td>2,940,000</td>
<td>1,470,000</td>
<td>950,000</td>
<td>520,000</td>
</tr>
<tr>
<td>Drawings</td>
<td>630,000</td>
<td>280,000</td>
<td>200,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Balance, December 31, 1989</td>
<td>$2,310,000</td>
<td>$1,190,000</td>
<td>$750,000</td>
<td>$370,000</td>
</tr>
</tbody>
</table>

### NUMBER 4

**A. Cash Collections from Customers**

- $145,000 (O)
  - Revenue from sales $155,000
  - Less increase in accounts receivable $(10,000)
  - Total $145,000

**B. Payment for Purchases of Property, Plant and Equipment**

- $50,000 (I)
  - Cost of equipment sold $40,000
  - Add: increase in property, plant and equipment $30,000
  - Total acquisitions of P.P.&E. $70,000
  - Less: P.P.&E. acquired through issuance of bonds payable (non-cash acquisition) $(20,000)
  - Payments to acquire P.P.&E. $50,000

**C. Proceeds from Sale of Equipment**

- $31,000 (I)
  - Cost of equipment sold $40,000
  - Less: Accumulated depreciation
    - Depreciation expense $33,000
    - Less increase in accumulated depreciation $(11,000)
    - Accumulated depreciation applicable to equipment sold $(22,000)
  - Book value of equipment sold $18,000
  - Add: Gain on sale of equipment $13,000
  - Proceeds from sale of equipment $31,000

**D. Cash Dividends Paid**

- $12,000 (F)
  - Net income $28,000
  - Less increase in retained earnings $13,000
  - Dividends declared $15,000
  - Less increase in dividends payable $(3,000)
  - Dividends paid $12,000

**E. Redemption of Bonds Payable**

- $17,000 (F)
  - Bonds payable issued to acquire P.P.&E. $20,000
  - Less increase in bonds payable $(3,000)
  - Payments to redeem bonds payable $17,000
1. **$185,000. Supplementary Information.**
The "additional information" states that Probe's tax payments during 1993 were debited to income taxes payable; therefore, the change in the account ($185,000 debit) represents the cash paid for income taxes.

When the indirect method is used to represent cash flows from operating activities, FAS #95 requires supplementary disclosure of cash paid for interest and taxes.

2. **$50,000. Supplementary Information.**
Cash paid for interest:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest expense</td>
<td>$46,000</td>
</tr>
<tr>
<td>+ Bond premium amortization</td>
<td>4,000</td>
</tr>
<tr>
<td>Cash paid</td>
<td>$50,000</td>
</tr>
</tbody>
</table>

**Bond Premium Amortization:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning balance</td>
<td>$150,000</td>
</tr>
<tr>
<td>- Premium retired</td>
<td>(75,000)</td>
</tr>
<tr>
<td>Ending balance</td>
<td>(71,000)</td>
</tr>
<tr>
<td>Amortization of bond premium</td>
<td>4,000</td>
</tr>
</tbody>
</table>

When the indirect method is used to report cash flows from operating activities, FAS # 95 requires supplementary disclosure of cash paid for interest and taxes.

3. **$485,000. Financing.**
Cash paid to retire bonds:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond payable (Face value)</td>
<td>$500,000</td>
</tr>
<tr>
<td>+ Premium on bond payable</td>
<td>75,000</td>
</tr>
<tr>
<td>Carrying value of bond payable</td>
<td>$575,000</td>
</tr>
<tr>
<td>- Gain on retirement of bond payable</td>
<td>(90,000)</td>
</tr>
<tr>
<td>Cash payment to retire bond</td>
<td>$485,000</td>
</tr>
</tbody>
</table>

Issuance and retirement of debt are financing activities.

4. **$255,000. Financing.**
Cash received from issuance of common stock:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in common stock (par)</td>
<td>$200,000</td>
</tr>
<tr>
<td>Increase in A.P.I.C.</td>
<td>55,000</td>
</tr>
<tr>
<td>Total</td>
<td>$255,000</td>
</tr>
</tbody>
</table>

Issuance and retirement of stock and acquisition and sale of treasury stock are financing activities.

5. **$65,000. Financing.**
Cash dividends paid:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease in retained earnings</td>
<td>$80,000</td>
</tr>
<tr>
<td>- Increase in dividend payable</td>
<td>(15,000)</td>
</tr>
<tr>
<td>Cash payment</td>
<td>$65,000</td>
</tr>
</tbody>
</table>

The "additional information" states there were no changes to retained earnings other than dividends declared. Payment of dividends is a financing activity.

6. **$20,000. Investing.**
Cash received from sale of equipment:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of equipment sold</td>
<td>$50,000</td>
</tr>
<tr>
<td>- Accumulated depreciation</td>
<td>(23,000)</td>
</tr>
<tr>
<td>Book value of equipment sold</td>
<td>$27,000</td>
</tr>
<tr>
<td>- Loss on sale</td>
<td>(7,000)</td>
</tr>
<tr>
<td>Cash received</td>
<td>$20,000</td>
</tr>
</tbody>
</table>

**Accumulated depreciation on equipment sold**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation expense</td>
<td>$88,000</td>
</tr>
<tr>
<td>- Increase in accumulated depreciation</td>
<td>(65,000)</td>
</tr>
<tr>
<td>Accumulated depreciation on equipment sold</td>
<td>$23,000</td>
</tr>
</tbody>
</table>

Acquisition and disposal of fixed assets are Investing Activities.
NUMBER 6

I. Current ratio = Current assets + current liabilities
II. Inventory turnover = Cost of goods sold + Average inventory
   Average inventory = (beginning inventory + ending inventory) / 2
III. Total debt + total asset ratio (debt ratio)

1. I, II, and III—no effect.
   A stock dividend reduces retained earnings and increases paid-in capital by an equal amount; therefore, it has
   no effect in total stockholders’ equity, or any of the elements in the above ratios.

2. I—decrease; II—no effect; III—increase.
   Declaration of a cash dividend increases current liabilities and decreases retained earnings (thus stockholders’
   equity). The increase in current liabilities would decrease the current ratio (I) and increase the debt ratio (II).

3. I and II—decrease; III—increase.
   The return of merchandise would decrease current assets (accounts receivable decreases by the sales value;
   inventory increases by the cost of the items) resulting in a decrease of the current ratio (I).
   The return of merchandise would reduce cost of goods sold and increase inventory resulting in a decrease in
   inventory turnover (II).
   The return of merchandise does not effect total debt; however, the decrease in assets (current) will cause the
   debt ratio (III) to increase.

4. I—increase; II—no effect; III—decrease.
   The payment of accounts payable reduces current assets and current liabilities by an equal dollar amount.
   As the current ratio is greater than 1 to 1, the decrease in current assets is proportionately smaller than the
   decrease in current liabilities, resulting in an increase in the current ratio (I).
   As the debt ratio is less than 1 to 1, the decrease in debt is proportionately greater than the decrease in assets,
   resulting in a decrease in the debt ratio (III).
   The inventory turnover (II) is not effected as the payment of accounts payable does not effect any of its
   elements.

5. I—increase; II—no effect; III—increase.
   The increase in receivables would increase current assets and the current ratio (I).
   The inventory turnover (II) is not effected as this transaction does not effect any of its elements. As the fire
   damage resulted in a loss, the insurance receivable is less than the book value of the building and total assets
   have decreased. The decrease in assets results in an increase in the debt ratio (III).

6. I—increase; II—no effect; III—decrease.
   An increase in selling price with no decrease in units sold would result in an increase in proceeds from sale
   (cash or accounts receivable) increasing current assets and the current ratio (I). The inventory turnover (II)
   would not be effected as none of its elements are effected.
   The increase in assets would result in a decrease in the debt ratio (III).
# Chapter 8 Simulation Exercises

## RECENTLY RELEASED SIMULATION STATEMENT OF CASH FLOWS

### Tab 2 - Situation/Balance Sheet

Comparative balance sheets for Bayshore Industries, Inc. as of December 31, year 2 and year 1, are presented below. Use this information to answer the subsequent questions.

<table>
<thead>
<tr>
<th>Bayshore Industries, Inc.</th>
<th>Year 2</th>
<th>Year 1</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$216,000</td>
<td>$144,000</td>
<td>$72,000</td>
</tr>
<tr>
<td>Trade receivables - net</td>
<td>3,434,000</td>
<td>1,971,000</td>
<td>1,463,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>810,000</td>
<td>216,000</td>
<td>594,000</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>18,000</td>
<td>—</td>
<td>18,000</td>
</tr>
<tr>
<td>Total current assets</td>
<td>4,478,000</td>
<td>2,331,000</td>
<td>2,147,000</td>
</tr>
<tr>
<td>Property and equipment</td>
<td>7,780,000</td>
<td>7,740,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Less: accumulated depreciation</td>
<td>576,000</td>
<td>455,000</td>
<td>121,000</td>
</tr>
<tr>
<td>Property and equipment – net</td>
<td>7,204,000</td>
<td>7,285,000</td>
<td>(81,000)</td>
</tr>
<tr>
<td>Intangibles, less accumulated amortization of $14,400 - year 2 and $7,200 - year 1</td>
<td>21,600</td>
<td>28,800</td>
<td>(7,200)</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$11,703,600</td>
<td>$9,644,800</td>
<td>$2,058,800</td>
</tr>
<tr>
<td><strong>Liabilities and Stockholders' Equity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>$872,600</td>
<td>$396,800</td>
<td>$475,800</td>
</tr>
<tr>
<td>Line of credit</td>
<td>108,000</td>
<td>90,000</td>
<td>18,000</td>
</tr>
<tr>
<td>Current portion of long-term debt</td>
<td>29,000</td>
<td>27,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>1,009,600</td>
<td>513,800</td>
<td>495,800</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>3,069,000</td>
<td>3,098,000</td>
<td>(29,000)</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>4,078,600</td>
<td>3,611,800</td>
<td>466,800</td>
</tr>
<tr>
<td>Stockholders’ equity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock</td>
<td>9,000</td>
<td>9,000</td>
<td>0</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>5,400,000</td>
<td>5,400,000</td>
<td>0</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>2,216,000</td>
<td>624,000</td>
<td>1,592,000</td>
</tr>
<tr>
<td><strong>Total stockholders' equity</strong></td>
<td>7,625,000</td>
<td>6,033,000</td>
<td>1,592,000</td>
</tr>
<tr>
<td><strong>Total liabilities and stockholders' equity</strong></td>
<td>$11,703,600</td>
<td>$9,644,800</td>
<td>$2,058,800</td>
</tr>
</tbody>
</table>
## Tab 3 – Income Statement/Transactions

The Statement of Income and Retained Earnings for Bayshore Industries, Inc. for year 2, as well as additional information regarding the company’s operations for the year, is presented below. Use this information to answer the subsequent questions.

<table>
<thead>
<tr>
<th>Bayshore Industries, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statement of Income and Retained Earnings</strong></td>
</tr>
<tr>
<td><strong>For the year ended December 31, Year 2</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>$19,800,000</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>9,000,000</td>
</tr>
<tr>
<td>Gross profit on sales</td>
<td>10,800,000</td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
</tr>
<tr>
<td>Selling expenses</td>
<td>3,600,000</td>
</tr>
<tr>
<td>General and administrative expenses</td>
<td>4,050,000</td>
</tr>
<tr>
<td>Other operating expenses</td>
<td>393,300</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>8,043,300</td>
</tr>
<tr>
<td>Operating income</td>
<td>2,756,700</td>
</tr>
<tr>
<td>Other income and expenses</td>
<td></td>
</tr>
<tr>
<td>Gain/loss on property and equipment disposals</td>
<td>18,000</td>
</tr>
<tr>
<td>Interest income</td>
<td>9,000</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(252,000)</td>
</tr>
<tr>
<td>Other income and expenses - net</td>
<td>(225,000)</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>2,531,700</td>
</tr>
<tr>
<td>Provision for income taxes</td>
<td>759,700</td>
</tr>
</tbody>
</table>

| Net income                                | 1,772,000 |
| Retained earnings - beginning             | 624,000   |
| Dividends paid                            | 180,000   |
| Retained earnings - ending                | $2,216,000 |

**Additional information on transactions during the year ended December 31, year 2:**
- All accounts receivable relate to customer sales.
- All accounts payable relate to suppliers.
- All fixed assets were acquired for cash.
- A building with original cost of $360,000 and accumulated depreciation of $319,500 was sold for $58,500.
- The company had no new debt in year 2.
- Interest paid in current year was $250,000.
- Cash paid for income taxes in current year were $700,000.
- There were no noncash financing or investing transactions during the year.
<table>
<thead>
<tr>
<th><strong>Dropdown Selection List</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Increase/decrease in prepaid expenses</strong></td>
</tr>
<tr>
<td><strong>Cash paid for income taxes</strong></td>
</tr>
<tr>
<td><strong>Net income/loss</strong></td>
</tr>
<tr>
<td><strong>Depreciation and amortization expense</strong></td>
</tr>
<tr>
<td><strong>Allowance for bad debts</strong></td>
</tr>
<tr>
<td><strong>Cash collected from licensees</strong></td>
</tr>
<tr>
<td><strong>Increase/decrease in intangibles</strong></td>
</tr>
</tbody>
</table>
Tab 4 – Cash Flows Statement

Using the indirect method, prepare the portions of the Statement of Cash Flows of Bayshore Industries, Inc., shown below, for the year ended December 31, year 2. Next to each activity, enter the appropriate value. Enter negative numbers with a leading minus (−) sign.

Bayshore Industries, Inc.
Statement of Cash Flows
For the year ended December 31, year 2

Cash flows from operating activities:

Net cash provided by operating activities

Cash flows from investing activities:

Net cash used in investing activities

Cash flows from financing activities:

Net cash used by financing activities

Net increase (decrease) in cash and cash equivalents

Supplemental disclosures:
Tab 6 – Research

When is the acquisition of equipment reported in the operating section of the statement of cash flows?
This problem consists of Sections A and B

A:

Question Number 4(a) consists of 5 items. These items require numerical answers and selection of the proper cash flow category. **Answer all items.** Your grade will be based on the total number of correct answers.

Following are selected balance sheet accounts of Zach Corp. at December 31, 1991 and 1990, and the increases or decreases in each account from 1990 to 1991. Also presented is selected income statement information for the year ended December 31, 1991, and additional information.

<table>
<thead>
<tr>
<th>Selected balance sheet accounts</th>
<th>1991</th>
<th>1990</th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>$ 34,000</td>
<td>$ 24,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Property, plant, and equipment</td>
<td>277,000</td>
<td>247,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(178,000)</td>
<td>(167,000)</td>
<td>(11,000)</td>
</tr>
<tr>
<td><strong>Liabilities and stockholders' equity:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds payable</td>
<td>49,000</td>
<td>46,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Dividends payable</td>
<td>8,000</td>
<td>5,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Common stock, $1 par</td>
<td>22,000</td>
<td>19,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>9,000</td>
<td>3,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>104,000</td>
<td>91,000</td>
<td>13,000</td>
</tr>
</tbody>
</table>

**Selected income statement information for the year ended December 31, 1991**

- Sales revenue: $155,000
- Depreciation: 33,000
- Gain on sale of equipment: 13,000
- Net income: 28,000

**Additional information**

- Accounts receivable relate to sales of merchandise.
- During 1991, equipment costing $40,000 was sold for cash.
- During 1991, $20,000 of bonds payable were issued in exchange for property, plant, and equipment. There was no amortization of bond discount or premium.

**Required:**

Items A through E represent activities that will be reported in Zach's statement of cash flows for the year ended December 31, 1991. The following two responses are required for each item:

- Determine the amount that should be reported in Zach's 1991 statement of cash flows.
- Using the list below, determine the category in which the amount should be reported in the statement of cash flows.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>O.</td>
<td>Operating activity</td>
</tr>
<tr>
<td>I.</td>
<td>Investing activity</td>
</tr>
<tr>
<td>F.</td>
<td>Financing activity</td>
</tr>
</tbody>
</table>

**Items to be answered:**

A. Cash collections from customers (direct method).
B. Payments for purchase of property, plant, and equipment.
C. Proceeds from sale of equipment.
D. Cash dividends paid.
E. Redemption of bonds payable.
B:

In preparing a statement of cash flows, we use the phrase, “cash equivalents.” What is the FASB’s definition of cash equivalents?

Note: On the computerized CPA exam, the candidate will be required to use the research tab to look for the definition.
# Tab 4 – Cash Flows Statement

Using the indirect method, prepare the portions of the Statement of Cash Flows of Bayshore Industries, Inc., shown below, for the year ended December 31, year 2. Next to each activity, enter the appropriate value. Enter negative numbers with a leading minus (−) sign.

<table>
<thead>
<tr>
<th>Bayshore Industries, Inc.</th>
<th>Statement of Cash Flows</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For the year ended December 31, year 2</td>
</tr>
</tbody>
</table>

## Cash flows from operating activities:
- **Net income/loss**: 1,772,000
- **Depreciation and amortization expense**: 447,700
- **Increase/decrease in trade receivables – net**: −1,463,000
- **Increase/decrease in inventory**: −594,000
- **Increase/decrease in prepaid expenses**: −18,000
- **Gain/loss on property and equipment disposals**: −18,000
- **Increase/decrease in accounts payable and accrued expenses**: 475,800

- **Net cash provided by operating activities**: 602,500

## Cash flows from investing activities:
- **Purchases of property and equipment**: −400,000
- **Proceeds from plant and equipment disposals**: 58,500

- **Net cash used in investing activities**: −341,500

## Cash flows from financing activities:
- **Proceeds from/repayment of line of credit**: 18,000
- **Repayment of long-term debt**: −27,000
- **Dividends paid**: −180,000

- **Net cash used by financing activities**: −189,000

- **Net increase (decrease) in cash and cash equivalents**: 72,000

## Supplemental disclosures:
- **Interest paid**: 250,000
- **Cash paid for income taxes**: 700,000
CHANGE IN CASH AND CASH EQUIVALENTS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72,000</td>
</tr>
</tbody>
</table>

**CASH FROM OPERATIONS** 602,500

**INVESTING ACTIVITIES**
- Sold Building 58,500
- Purchased PP & E 400,000

**FINANCING ACTIVITIES**
- Line of Credit 18,000
- Dividend Paid 180,000
- Paid LT Debt 27,000
- Total Sources of Cash 679,000
- Total uses of cash 607,000
- Increase in cash 72,000

**NOTES: SEPARATE DISCLOSURES**
- Interest Paid 250,000
- Taxes Paid 700,000

**CASH GENERATED FROM OPERATIONS**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income</td>
<td>1,772,000</td>
</tr>
<tr>
<td>Increase in A/R</td>
<td>1,463,000</td>
</tr>
<tr>
<td>Increase in A/P and</td>
<td>594,000</td>
</tr>
<tr>
<td>Accrued Expense</td>
<td>475,800</td>
</tr>
<tr>
<td>Depreciation Expense</td>
<td>440,500</td>
</tr>
<tr>
<td>Amiz Intangible</td>
<td>7,200</td>
</tr>
<tr>
<td>Cash from Operations</td>
<td>602,500</td>
</tr>
<tr>
<td>Increase in Inventory</td>
<td>18,000</td>
</tr>
<tr>
<td>Gain on Sale of PP&amp;C</td>
<td>18,000</td>
</tr>
</tbody>
</table>

**SOLUTION-RESEARCH**

FAS 95.24; C25.122

For example, the acquisition and sale of equipment to be used by the enterprise or rented to others generally are investing activities. However, equipment sometimes is acquired or produced to be used by the enterprise or rented to others for a short period and then sold. In those circumstances, the acquisition or production and subsequent sale of those assets shall be considered operating activities.
A:

A. Cash collections from customers $145,000 (O)
   Revenue from sales $155,000
   Less increase in accounts receivable (10,000)
   $145,000

B. Payment for purchases of property, plant and equipment $50,000 (I)
   Cost of equipment sold $40,000
   Add: increase in property, plant and equipment 30,000
   Total acquisitions of P.P.&E. $70,000
   Less: P.P.&E. acquired through issuance of bonds payable (non-cash acquisition) (20,000)
   Payments to acquire P.P.&E. $50,000

C. Proceeds from sale of equipment $31,000 (I)
   Cost of equipment sold $40,000
   Less: Accumulated depreciation
      Depreciation expense $33,000
      Less increase in accumulated depreciation (11,000)
      Accumulated depreciation applicable to equipment sold (22,000)
   Book value of equipment sold $18,000
   Add: Gain on sale of equipment 13,000
   Proceeds from sale of equipment $31,000

D. Cash dividends paid $12,000 (F)
   Net income $28,000
   Less increase in retained earnings 13,000
   Dividends declared $15,000
   Less increase in dividends payable (3,000)
   Dividends paid $12,000

E. Redemption of bonds payable $17,000 (F)
   Bonds payable issued to acquire P.P.&E. $20,000
   Less increase in bonds payable (3,000)
   Payments to redeem bonds payable $17,000

B:

In SFAS 95, the FASB defines cash equivalents as follows:
Cash equivalents are short-term, highly liquid investments that are both:
a) Readily converted to known amounts of cash
b) So near maturity that they present insignificant risk of change in value because of changes in interest rates.
Chapter Nine
Bonds, Accounting for Debt

Accounting Standards Codification

This chapter includes ASC 405, Liabilities, ASC 450, Contingencies, ASC 480, Distinguishing Liabilities from Equity, ASC 410, Exit or Disposal Costs, ASC 275, Risk and Uncertainties, ASC 815, Derivatives and Hedges and ASC 825, Financial Instruments.

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  Issue Costs
  Amortization of Bond Discount and Premium
  Issuance of Bonds Between Interest Dates
  Gains or Losses from Debt Extinguishment (ASC 405)

INVESTMENT IN BONDS............................................................................................................ ..................9-5
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  Amortization of Bond Discount and Premium
  Purchase of Bond Investments Between Interest Dates

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  Conversion of Debt
  Exercise of Warrants (Issuer)
  Convertible Stock and Stock With Stock Purchase Warrants
  Conversion of Investment Securities
  Exercise of Warrants (Investor)

DISCLOSURE OF LONG-TERM OBLIGATIONS (ASC 405) ....................................................................9-10
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  Unconditional Purchase Obligation

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  Types of Derivative Instruments
  Gains or Losses on Derivative Instruments
  Embedded Derivatives
  Disclosures
  FASB Definition of Derivative Instruments
  Definitions of Underlying, Notional Amount, and Payment Provisions
  Fair Value Hedge
  Fair Value Hedge – Interest Rate Swap
  Cash Flow Hedge – Forecasted Transaction
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Estimation of the Amount of Loss
Disclosure
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Earnings Variability
Gain Contingencies
General or Unspecified Business Risks
Remote Contingencies

ASC 275: DISCLOSURE OF CERTAIN SIGNIFICANT RISKS AND UNCERTAINTIES

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Certain Significant Estimates
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Concentration
Concentrations – Labor Supply
Concentration – Outside of Entity's Home Country

ESTIMATED LIABILITIES

CLASSIFICATION OF SHORT-TERM OBLIGATIONS (ASC 405)

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Criteria for Exclusion as a Current Liability
Disclosure

CLASSIFICATION OF CALLABLE OBLIGATIONS (ASC 405)

Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity
(ASC 480)
ASC 420, Costs Associated with Exit or Disposal Activities
Appendix

IFRS – BONDS, ACCOUNTING FOR DEBT
Chapter Nine
Bonds, Accounting for Debt

BONDS ISSUED

Long-term certificates of indebtedness usually issued in denominations of $1,000 with the market price being quoted in 100's. The terms of the debt issue are specified in the indenture (contract between issuer and investor) which is policed by a trustee (representative of investors). Interest is normally paid semi-annually based on a stated percentage of the face value of the bond issue, referred to as the coupon or nominal rate. This fixed dollar interest is adjusted to the prevailing market (yield) rate of interest for securities of equivalent risk by changes in the market price of the bond issue. The market value of the bonds will vary inversely with changes in the market rate of interest.

Issuance:
Bonds are recorded as liabilities at their face value when issued. The issuance of bonds above or below their face value reflects the difference between the market rate of interest and the coupon rate on the date of issuance, as follows:

<table>
<thead>
<tr>
<th>IF</th>
<th>Bonds Sell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Rate &lt; Coupon Rate</td>
<td>Above F.V. @ Premium</td>
</tr>
<tr>
<td>Market Rate = Coupon Rate</td>
<td>At F.V.</td>
</tr>
<tr>
<td>Market Rate &gt; Coupon Rate</td>
<td>Below F.V. @ Discount</td>
</tr>
</tbody>
</table>

(Note: Market price and market rate [yield] are inversely related.)

Any difference between the amount paid and the face value should be recorded separately as a Premium or Discount on bonds payable.

Journal entries to record issuance at Premium and Discount:

\[
\begin{align*}
\text{Cash} & \quad \text{Cash} \\
\text{Bonds Payable} & \quad \text{Discount on Bonds Payable} \\
\text{Premium on Bonds Payable} & \quad \text{Discount} \\
$102,000 & \quad $98,000 \\
$100,000 & \quad 2,000 \\
2,000 & \quad $100,000 \\
(102) & \quad (98)
\end{align*}
\]

The carrying value of the liability will be its face value plus any premium or less any discount, and will be periodically adjusted by the amortization of the premium or discount to interest expense over the life of the issue so as to reflect the face value at maturity. The discount or premium should not be reported separately as a deferred charge or credit, as it does not represent an asset or liability separable from the debt which gave rise to it (ASC 405).

Issue costs are treated separately as deferred charges and amortized over the life of the bond issue. They should not be combined with a discount or used to reduce a premium. Issue costs include all costs of issuing the bond, such as underwriting, accounting, and legal fees, S.E.C. registration, printing, etc., and represent an asset which is carried on the balance sheet as a deferred charge (ASC 405).

In order to establish the proceeds of a bond issue, the present value of the interest payments and the maturity payment of face value are computed using the factors for the yield rate.

Example: On January 2, 19XX, Firm A issued 7% bonds, face value $1,000,000 due at the end of 5 years with interest paid annually.
Amortization of Bond Discount and Premium:
The discount or premium on a bond issue should be amortized over the life of the issue to reflect the face value at maturity. There are two methods of bond premium or discount amortization:

1. The effective interest method (preferable per ASC 405).
2. The straight-line method (allowed if not materially different than the interest method).

ASC 405 requires an enterprise which acquires or originates a loan (lender and purchaser) to defer loan origination fees and costs and recognize such amounts as adjustments of the yield using the interest method. The charges (revenues) may not be offset against the costs of the loan. These adjustments are to be made on a contract by contract basis (unless aggregation of the adjustments causes immaterial differences). The straight-line method may only be used for demand loans or revolving lines of credit under certain circumstances.

Sale at Discount—Case Example A (above)

(1) Effective Interest Method Amortization

<table>
<thead>
<tr>
<th>Year</th>
<th>Interest Expense</th>
<th>Interest Paid</th>
<th>Discount (1) – (2)</th>
<th>Carrying Value EOY (4) + (3)</th>
<th>Interest Rate (1) + (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue</td>
<td>$76,806</td>
<td>$70,000</td>
<td>$6,806</td>
<td>966,876</td>
<td>8%</td>
</tr>
<tr>
<td>1</td>
<td>77,350</td>
<td>70,000</td>
<td>7,350</td>
<td>974,226</td>
<td>8%</td>
</tr>
<tr>
<td>2</td>
<td>77,938</td>
<td>70,000</td>
<td>7,938</td>
<td>982,164</td>
<td>8%</td>
</tr>
<tr>
<td>3</td>
<td>78,573</td>
<td>70,000</td>
<td>8,573</td>
<td>990,737</td>
<td>8%</td>
</tr>
<tr>
<td>4</td>
<td>79,263</td>
<td>70,000</td>
<td>9,263</td>
<td>1,000,000</td>
<td>8%</td>
</tr>
<tr>
<td>5</td>
<td>$389,930</td>
<td>$389,930</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(2) Straight-Line Method Amortization

<table>
<thead>
<tr>
<th>Year</th>
<th>Interest Expense Paid</th>
<th>Discount Amort. 39.930/5 yr.</th>
<th>Interest Expense (1) + (2)</th>
<th>Carrying Value EOY (4) + (2)</th>
<th>Interest Rate (3) + (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue</td>
<td>$70,000</td>
<td>7,986</td>
<td>77,986</td>
<td>968,056</td>
<td>8.12%</td>
</tr>
<tr>
<td>1</td>
<td>70,000</td>
<td>7,986</td>
<td>77,986</td>
<td>976,042</td>
<td>8.06%</td>
</tr>
<tr>
<td>2</td>
<td>70,000</td>
<td>7,986</td>
<td>77,986</td>
<td>984,028</td>
<td>7.99%</td>
</tr>
<tr>
<td>3</td>
<td>70,000</td>
<td>7,986</td>
<td>77,986</td>
<td>992,014</td>
<td>7.93%</td>
</tr>
<tr>
<td>4</td>
<td>70,000</td>
<td>7,986</td>
<td>77,986</td>
<td>1,000,000</td>
<td>7.86%</td>
</tr>
<tr>
<td>5</td>
<td>$39,930</td>
<td>$389,930</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note: (1) Total discount amortizations are the same.  
(2) Total interest expenses are the same.  
(3) The effective interest method results in:  
  - constant rate of interest  
  - increasing interest expense per period  
  - increasing discount amortization per period  
(4) The straight-line method results in:  
  - varying interest rate  
  - constant interest expense and discount amortization

Journal entry to record interest expense and amortization for Year 1:

<table>
<thead>
<tr>
<th>Interest Expense</th>
<th>Effective Interest</th>
<th>Straight-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$76,806</td>
<td>$77,986</td>
</tr>
<tr>
<td>Discount on Bonds Payable</td>
<td>6,806</td>
<td>7,986</td>
</tr>
</tbody>
</table>

Sale at Premium—Case Example B (previous)

(1) Effective Interest Method

<table>
<thead>
<tr>
<th>Year</th>
<th>Interest Expense</th>
<th>Effective Interest Amort.</th>
<th>Carrying Value</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue</td>
<td></td>
<td></td>
<td></td>
<td>6%</td>
</tr>
<tr>
<td>1</td>
<td>62,527</td>
<td>70,000</td>
<td>7,473</td>
<td>6%</td>
</tr>
<tr>
<td>2</td>
<td>62,079</td>
<td>70,000</td>
<td>7,921</td>
<td>6%</td>
</tr>
<tr>
<td>3</td>
<td>61,604</td>
<td>70,000</td>
<td>8,396</td>
<td>6%</td>
</tr>
<tr>
<td>4</td>
<td>61,100</td>
<td>70,000</td>
<td>8,900</td>
<td>6%</td>
</tr>
<tr>
<td>5</td>
<td>60,565</td>
<td>70,000</td>
<td>9,435</td>
<td>6%</td>
</tr>
</tbody>
</table>

Total: $307,875

(2) Straight-Line Method

<table>
<thead>
<tr>
<th>Year</th>
<th>Interest Expense</th>
<th>Premium Carrying Interest Amort.</th>
<th>Carrying Value</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue</td>
<td></td>
<td>42,125+5 yrs.</td>
<td></td>
<td>6%</td>
</tr>
<tr>
<td>1</td>
<td>70,000</td>
<td>$ 8,425</td>
<td>61,575</td>
<td>5.91%</td>
</tr>
<tr>
<td>2</td>
<td>70,000</td>
<td>8,425</td>
<td>61,575</td>
<td>5.96%</td>
</tr>
<tr>
<td>3</td>
<td>70,000</td>
<td>8,425</td>
<td>61,575</td>
<td>6.01%</td>
</tr>
<tr>
<td>4</td>
<td>70,000</td>
<td>8,425</td>
<td>61,575</td>
<td>6.06%</td>
</tr>
<tr>
<td>5</td>
<td>70,000</td>
<td>8,425</td>
<td>61,575</td>
<td>6.11%</td>
</tr>
</tbody>
</table>

Total: $42,125

Note: (a) Total premium amortizations are the same.  
(b) Total interest expenses are the same.  
(c) The effective interest method results in:  
  - constant rate of interest  
  - decreasing interest expense per period  
  - increasing premium amortization  
(d) The straight-line method results in:  
  - varying rate of interest per period  
  - constant interest expense and premium amortization
Journal entry to record interest expense and amortization for Year 1:

<table>
<thead>
<tr>
<th></th>
<th>Effective Interest</th>
<th>Straight-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Expense</td>
<td>$62,527</td>
<td>$61,575</td>
</tr>
<tr>
<td>Premium on Bonds Payable</td>
<td>7,473</td>
<td>8,425</td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td>$70,000</td>
</tr>
</tbody>
</table>

**Issuance of Bonds Between Interest Dates:**

Bonds issued between interest dates are sold for their market value (refer above) plus accrued interest since the last interest payment date. For example, if $1,000,000 F.V., 6% bonds, interest payment dates 1/1 and 7/1, are issued on 3/1 at 102, the price paid for the five-year bonds would be computed as follows:

- Market value on 3/1 (102% × $1,000,000) = $1,020,000
- Accrued interest 1/1 to 3/1 ($1,000,000 × 6% × 2/12) = 10,000
- Total to be paid on 3/1 = $1,030,000

Journal entry to record issuance on 3/1:

<table>
<thead>
<tr>
<th></th>
<th>Cash</th>
<th>Bonds Payable</th>
<th>Premium on bonds payable</th>
<th>Bond interest payable*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$1,030,000</td>
<td>$1,000,000</td>
<td>20,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

*The credit could also be made to interest expense, in which case, on 7/1 there would be no charge to bond interest payable and the charge to interest expense would be for $28,621 (6 months interest of $30,000 less the premium amortization of $1,379).

The journal entry to record the payment of interest on 7/1 would be (assuming straight-line amortization):

<table>
<thead>
<tr>
<th></th>
<th>Cash 1,000,000 × 6% × 1/2</th>
<th>Bond interest payable</th>
<th>Premium on bonds payable (20,000/58 × 4)</th>
<th>Interest expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond interest payable</td>
<td>$10,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premium on bonds payable</td>
<td>1,379</td>
<td></td>
<td></td>
<td>18,621</td>
</tr>
<tr>
<td>Interest expense</td>
<td></td>
<td></td>
<td></td>
<td>$30,000</td>
</tr>
</tbody>
</table>

If the bonds had been sold at a discount, it would not have affected the accrued interest as of 3/1; however, it would affect the interest expense recognized on 7/1, as the amortization of the discount for 4 months would increase interest expense. The debit to bond interest payable on 7/1 would also be unaffected.

**Gains or Losses From Debt Extinguishment—ASC 405**

**Determining Gain or Loss on Redemption or Purchase:** ASC 405 states that: "... A difference between the reacquisition price and the net carrying amount of the extinguished debt should be recognized currently in income of the period of extinguishment as losses or gains and identified as a separate item ... Gains and losses should not be amortized to future periods."

When bonds are redeemed or purchased prior to maturity, the gain or loss is determined by the difference between the carrying value of the bonds and the amount given up to acquire the bonds. If the bonds are redeemed at a time other than a scheduled interest payment date, the accrued interest, including amortization of bond premium or discount, and the amortization of bond issue costs should be determined and recorded up to the date of redemption or purchase.

**ASC 225**—Historically, gains and losses from extinguishment of debt have been recorded as extraordinary items (SFAS #4). ASC 405 rescinded SFAS #4 and now requires that these gains or losses normally be recorded as a part of income from continuing operations. In the rare occasion in which the gains or losses from extinguishment of debt meet the criteria of unusual and infrequent (ASC 225), the transaction would be recorded as an extraordinary item.
According to ASC 405, a liability is not extinguished by an in-substance defeasance. It is derecognized only if the debtor:
• pays the creditor and is relieved of its obligation or
• is legally released from being the primary obligor.

**Balance Sheet Presentation—Long-Term Debt**

**Bond Discount:**

<table>
<thead>
<tr>
<th></th>
<th>Current Year</th>
<th>Previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Amount</td>
<td>$24,000,000</td>
<td>$24,000,000</td>
</tr>
<tr>
<td>Less unamortized discount</td>
<td>2,070,000</td>
<td>2,192,000</td>
</tr>
<tr>
<td>Long-term debt less unamortized discount</td>
<td>$21,930,000</td>
<td>$21,808,000</td>
</tr>
</tbody>
</table>

**Bond Premium:**

<table>
<thead>
<tr>
<th></th>
<th>Current Year</th>
<th>Previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Amount</td>
<td>$24,000,000</td>
<td>$24,000,000</td>
</tr>
<tr>
<td>Add unamortized premium</td>
<td>600,000</td>
<td>650,000</td>
</tr>
<tr>
<td>Long-term debt plus unamortized premium</td>
<td>$24,600,000</td>
<td>$24,650,000</td>
</tr>
</tbody>
</table>

**INVESTMENT IN BONDS**

**Valuation:**
The acquisition of bonds as an investment is initially recorded at cost which includes the costs of acquisition. Any difference between the cost and face value of the bonds should be amortized over the remaining life of the bond issue, except for short-term investments.

After acquisition, the carrying value of the investment in bonds is not usually adjusted for subsequent changes in the market rate of interest or resultant changes in the market value of the bonds; however, when a substantial decline in market value occurs, and it is evident that it is not a mere temporary decline, the loss in value should be recognized currently in income (refer LCM). Investment in bonds is usually reported on the balance sheet at cost with the market value being disclosed parenthetically or in the notes to the financial statements.

**Amortization of Bond Discount and Premium:**
The discount or premium on a bond investment should be amortized over the life of the bond so as to reflect the face value as the book value at maturity, and to adjust the interest earned over the life of the investment to the effective yield. There are two methods of bond premium or discount amortization:
1. The effective interest method (ASC 405).
2. The straight-line method (allowable if result is not materially different).

**Example:** Referring to Case Examples A and B, entries to record the investment in the bonds and the first year's interest income on the investor's books by the effective interest and straight-line methods would be:

(a) Purchase at Discount—investment of $960,070
1. Acquisition:
   Investment in Bonds $960,070
   Cash $960,070

2. First year's interest income:

<table>
<thead>
<tr>
<th></th>
<th>Effective Interest</th>
<th>Straight-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$70,000</td>
<td>$70,000</td>
</tr>
<tr>
<td>Investment in Bonds</td>
<td>6,806</td>
<td>7,986</td>
</tr>
<tr>
<td>Interest Income</td>
<td>$76,806</td>
<td>$77,986</td>
</tr>
</tbody>
</table>
(b) Purchase at Premium—investment of $1,042,125

1. Acquisition:

<table>
<thead>
<tr>
<th></th>
<th>Investment in Bonds</th>
<th>Cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in Bonds</td>
<td>$1,042,125</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$1,042,125</td>
<td></td>
</tr>
</tbody>
</table>

2. First year's interest income:

<table>
<thead>
<tr>
<th></th>
<th>Effective Interest</th>
<th>Straight-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$70,000</td>
<td>$70,000</td>
</tr>
<tr>
<td>Investment in Bonds</td>
<td>$7,473</td>
<td>$8,425</td>
</tr>
<tr>
<td>Interest Income</td>
<td>62,527</td>
<td>61,575</td>
</tr>
</tbody>
</table>

Note that separate accounts for Bond Discount or Premium were not used; the investments were recorded at net cost, and the amortization of the discount or premium was directly to the investment account. Alternatively, separate accounts for premium or discount could be used; however, this method is usually not used.

**Purchase of Bond Investments Between Interest Dates:**

Bonds purchased between interest dates are purchased at cost (refer above) plus accrued interest since the last interest payment date. The entry to record the purchase of the bonds will include a receivable for the interest "purchased" which will be received when the first interest payment is received.

**Example:** $100,000 FV, 6% bonds are purchased on April 1 at 96, cost of acquisition $500. Interest payment dates are 1/1 and 7/1, and the bonds mature in 8 3/4 years—35 quarters.

**Amount Paid for Bonds**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market value on 4/1 ($100,000 × 96%)</td>
<td>$96,000</td>
</tr>
<tr>
<td>Acquisition Costs</td>
<td>$500</td>
</tr>
<tr>
<td>Cost of Bond Investment</td>
<td>$96,500</td>
</tr>
<tr>
<td>Accrued Interest 1/1 to 4/1 ($100,000 × 6% × 3/12)</td>
<td>$1,500</td>
</tr>
<tr>
<td>Total Paid on 4/1</td>
<td>$98,000</td>
</tr>
</tbody>
</table>

**Journal entry to record purchase on 4/1:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in Bonds</td>
<td>$96,500</td>
</tr>
<tr>
<td>Bond interest receivable</td>
<td>1,500</td>
</tr>
<tr>
<td>Cash</td>
<td>$98,000</td>
</tr>
</tbody>
</table>

**Journal entry to record first interest payment on 7/1:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash ($100,000 × 6% × 1/2)</td>
<td>$3,000</td>
</tr>
<tr>
<td>Investment in bonds (3,500/35 quarters)</td>
<td>100</td>
</tr>
<tr>
<td>Interest receivable</td>
<td>$1,500</td>
</tr>
<tr>
<td>Interest income</td>
<td>1,600</td>
</tr>
</tbody>
</table>

**Journal entry to record accrual of interest at 12/31:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond interest receivable</td>
<td>$3,000</td>
</tr>
<tr>
<td>Investment in bonds (2 quarters)</td>
<td>200</td>
</tr>
<tr>
<td>Interest income</td>
<td>$3,200</td>
</tr>
</tbody>
</table>

**CONVERTIBLES AND WARRANTS**

**Issuance of Convertible Debt and Debt With Stock Purchase Warrants (ASC 405)**

**Rule #1.** Convertible debt and debt with nondetachable warrants:

No portion of the proceeds from the issuance should be accounted for as attributable to the conversion privilege or the nondetachable stock purchase warrants. The debt securities should be recorded as shown previously, with appropriate recognition of any premium or discount.
Rule #2. Debt with detachable warrants:
The portion of the proceeds of the debt securities issued with detachable stock purchase warrants which is allocable to the warrants should be accounted for as paid-in capital. The allocation should be based on the relative fair market values of the two securities at the time of issuance. Any resulting discount or premium on the debt securities should be accounted for as such.

Example: The A Company issued $100,000, 8%, 20-year bonds payable with stock purchase warrants. Each $1,000 bond carried 20 warrants and each warrant was for one share of $10 par value common stock at an option price of $50. At the date of issuance, the debentures sold at 105 including the warrants.

Journal entries to record the issuance:

1. If warrants are nondetachable (or if bonds were convertible to 20 shares—conversion price $50):
   
   | Cash | $105,000 |
   | Bonds Payable | $100,000 |
   | Premium on Bonds Payable | 5,000 |

2. If warrants are detachable and traded separately for $5 immediately after issue:

   | Cash | $105,000 |
   | Discount on Bonds Payable | 5,000 |
   | Bonds Payable | $100,000 |
   | Common Stock Warrants | 10,000 |

Computation of Paid-In Capital Attributable to Warrants

| Proceeds $100,000 × 1.05 | $105,000 |
| Less FMV Warrants (20 × 100 × $5) | 10,000 |
| Proceeds Attributable to Bonds | $95,000 |
| Resulting Discount | 5,000 |
| Face Value of Bonds | $100,000 |

FMV of Warrants = 10,000 × $105,000 = $10,000
FMV of Bonds & Warrants = 105,000

Conversion of Debt:
At the date of conversion, the carrying value of the bonds must be removed from the accounts and the issuance of the new common stock recorded. There are two methods by which the issuance may be recorded:

1. Record the stock issuance at the fair market value of the stock or bonds, whichever is more clearly evident, recognizing a gain or loss on conversion as the difference between the carrying value of the bonds and the fair market value of the stock or bonds.

2. Record the stock issuance at the carrying value (book value) of the bonds. Upon conversion, if the par value of the stock issued is greater than the book value of the bonds, the excess is recorded as a debit to retained earnings. If the carrying value of the bonds is greater than the par value of the stock issued, the excess is credited to paid-in capital in excess of par.

The first method is generally viewed as theoretically preferable; however, the second method is generally used in practice.

Example: The B Company has outstanding $100,000 of 8% convertible bonds with an unamortized bond premium of $5,000. The conversion privilege provides for a conversion ratio of 20 to 1 (20 shares for each bond) for B Company's $10 par value common stock. A bondholder tenders for conversion a $1,000 bond when the market price of the common stock is $60.
Journal entries to record conversion:

1. **Conversion Recorded at Fair Market Value:**
   - Bonds Payable $1,000
   - Premium on Bonds Payable 50
   - Loss on Bond Conversion 150
   - Common Stock (20 shares of $10 par) $200
   - Paid-in Capital in Excess of Par 1,000

   **Computation of Loss:**
   - FMV Stock: 20 shares × $60 $1,200
   - BV Bonds: Face Value $1,000
   - Premium 5,000 ÷ 100 50
   - Loss on Conversion $150

2. **Conversion Recorded at Book Value of Bonds:**
   - Bonds Payable $1,000
   - Premiums on Bonds Payable 50
   - Common Stock $200
   - Paid-in Capital in Excess of Par 850

Prior to recording the conversion of the debt securities, all account balances related to the bonds must be brought up to date—amortization bond discount or premium and accrued interest from the last interest payment date to the date of conversion must be recorded.

Convertible bonds which are reacquired by the exercise of the call provision, by the issuer, should be accounted for in accordance with ASC 405. (See section on "Determining Gain or Loss on a Redemption or Purchase.")

**Exercise of Warrants:**
Warrants give the holder the option to buy a specified number of shares of stock, at a specified price, for a specified period of time. Upon exercise of the warrants, the holder must pay the price stated in the warrants and surrender the warrants to the issuing corporation. The issuance of the stock is recorded at the amount paid for the shares which includes any paid-in capital attributed to the warrants at issuance (refer above to Rule #2).

**Example:** Referring to the A Co. example, in which each bond carried 20 warrants each convertible into one share of common stock and assuming that 50 bondholders exercise their warrants:
   - (a) Number of Warrants Exercised 50 bonds × 20 = 1,000 warrants
   - (b) Amount Paid for Stock 1,000 shares × $50 = $50,000

Journal entries to record exercise of warrants:

1. **If warrants were nondetachable:**
   - Cash 50,000
   - Common Stock (1,000 shares × $10) $10,000
   - Paid-in Capital in Excess of Par 40,000

2. **If warrants were detachable:**
   - Cash $50,000
   - Common Stock Warrants* 5,000
     - Common Stock $10,000
     - Paid-in Capital in Excess of Par 45,000

*1,000 warrants exercised 1,000 at $5 of paid-in capital attributable to warrants at issuance.
**This treatment presumes that the bonds remain outstanding after the warrants are exercised.
Convertible Stock and Stock with Stock Purchase Warrants:
Although ASC 405 related specifically to the issuance of convertible debt and debt with stock purchase warrants, the reasoning is also applicable to the issuance of stock with stock purchase warrants and convertible stock. Therefore, the issuance of convertible stock and stock with stock purchase warrants is given the same accounting treatment as convertible debt and debt with stock purchase warrants. Furthermore, its conversion or the exercise of its warrants is accounted for in the same manner as convertible debt or debt with stock purchase warrants.

Investments in Convertible Securities and Securities with Stock Purchase Warrants
Valuation: The accounting for investments in convertible securities and securities with stock purchase warrants follows the accounting for their issuance.
1. Convertible securities and securities with nondetachable warrants:
The investment is recorded at cost which includes the costs of acquisition. No portion of the cost is attributed to the conversion privilege or the nondetachable stock purchase warrants.
2. Securities with detachable warrants:
The investment in securities with detachable stock purchase warrants constitutes the acquisition of two separate securities and requires that the cost of the investment be allocated to the different securities according to their relative market values.

Example: Referring to the same A Co. example, the acquisition of one of the bonds as an investment would be recorded as follows:

1. If warrants are nondetachable (or if bonds were convertible to 20 shares):
   Investment in Bonds $1,050
   Cash $1,050

2. If warrants are detachable:
   Investment in Bonds $950
   Investment in Stock Warrants 100
   Cash $1,050

Computation of Costs Attributable to Warrants

\[
\frac{\text{MV of Warrants}}{\text{MV of Bond & Warrants}} = \frac{5}{1,050} \times 1,050 = 5 \text{ per warrant}
\]

20 warrants/bond \times 5 = $100

Subsequent to acquisition, the valuation of the investment in bonds or stock account would be accounted for as explained in the earlier sections on investments in stocks and bonds.

Conversion of Investment Securities:
At conversion, the carrying value of the investment being converted must be removed from the accounts and the receipt of the investment in stock recorded. There are two methods by which the investment in stock may be recorded:
1. Record the new investment at its fair market value, or the fair market value of the converted security, whichever is more clearly evident, recognizing a gain or loss on the conversion at the difference between the carrying value of the converted security and the fair market value used to record the new investment.
2. Record the new investment at the carrying value of the security converted, recognizing no gain or loss on the conversion.
The first method is generally viewed as theoretically preferable; however, the second method is generally used in practice.

**Example:** Referring to the A Co. example, assuming that the investor's books also reflect a carrying value of $1,050 for one of these bonds, the journal entries to record the conversion would be:

1. **Conversion recorded at fair market value:**
   - Investment in Common Stock $1,200
   - Investment in Bonds $1,050
   - Gain on Conversion of Bond Investment 150

   **Computation of Gain**
   - FMV on Stock: 20 shares @ $60 = $1,200
   - BV of Bonds Surrendered 1,050
   - Gain on Conversion $ 150

2. **Conversion recorded at book value of converted security:**
   - Investment in Common Stock $1,050
   - Investment in Bonds $1,050

Prior to conversion of the convertible security, all account balances related to the convertible security must be brought up to date so as to reflect the current carrying value at conversion.

**Exercise of Warrants:**
Investments in stock are initially recorded at cost, including the cost of acquisition. When warrants are exercised to acquire stock investments, the cost includes the book value of the warrants surrendered and the amount paid in cash as specified in the warrants.

**Example:** Referring again to the A Co. example, assuming an investor owns 50 bonds and exercises all of his warrants to purchase stock, the journal entries to record his purchase would be:

1. **If warrants are nondetachable:**
   - Investment in Common Stock $102,500
   - Cash $50,000
   - Investment in Bonds $52,500

   **Computation**
   - 50 bonds × 20 warrants per bond = 1,000. 1000 shares × $50 = $50,000.

2. **If warrants are detachable:**
   - Investment in Common Stock $55,000
   - Cash $50,000
   - Investment in Stock Warrants 5,000

   **Computation**
   - Amount Paid: 1,000 shares at $50 = $50,000
   - Plus: 1,000 warrants at $5 = 5,000 = $55,000 Total Cost

**DISCLOSURE OF LONG-TERM OBLIGATIONS—ASC 405**

**Long-Term Borrowings and Stock Redemptions**
ASC 405 requires the following information to be disclosed regarding long-term borrowings and capital stock for each of the five years following the latest balance sheet:
(a) The combined aggregate amount of maturities and sinking fund requirements for all long-term borrowings.
(b) The amount of redemption requirements for all issues of capital stock that are redeemable at fixed or determinable prices on fixed or determinable dates, separately by issue or combined.
Example:
D Company has outstanding two long-term borrowings and one issue of preferred stock with mandatory redemption requirements. The first borrowing is a $100 million sinking fund debenture with annual sinking fund payments of $10 million in 19X2, 19X3, and 19X4, $15 million in 19X5 and 19X6, and $20 million in 19X7 and 19X8. The second borrowing is a $50 million note due in 19X5. The $30 million issue of preferred stock requires a 5 percent annual cumulative sinking fund payment of $1.5 million until retired.

D's disclosures might be as follows:

Maturities and sinking fund requirements on long-term debt and sinking fund requirements on preferred stock subject to mandatory redemption are as follows (000's):

<table>
<thead>
<tr>
<th>Year</th>
<th>Long-term debt</th>
<th>Preferred stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>19X2</td>
<td>$10,000</td>
<td>$1,500</td>
</tr>
<tr>
<td>19X3</td>
<td>10,000</td>
<td>1,500</td>
</tr>
<tr>
<td>19X4</td>
<td>10,000</td>
<td>1,500</td>
</tr>
<tr>
<td>19X5</td>
<td>65,000</td>
<td>1,500</td>
</tr>
<tr>
<td>19X6</td>
<td>15,000</td>
<td>1,500</td>
</tr>
</tbody>
</table>

**Unconditional Purchase Obligations**
An unconditional purchase obligation is the amount which a company is obligated to pay for a contract which calls for the purchase of a minimum quantity of goods at a fixed minimum price. For such obligations which are noncancelable and have a remaining term in excess of one year (and have not been pre-recorded on the balance sheet), the following shall be disclosed.
(a) The nature and term of the obligation(s).
(b) The amount of the fixed and determinable portion of the obligation(s) as of the date of the latest balance sheet presented in the aggregate and, if determinable, for each of the five succeeding fiscal years.
(c) The nature of any variable components of the obligation(s).
(d) The amounts purchased under the obligation(s) for each period for which an income statement is presented.

For those unconditional purchase obligations which have been recorded on the balance sheet (asset and related liability), the aggregate amount of payments which have been recognized (on the balance sheet) shall be disclosed.

**Case Example of Unrecorded Purchase Obligation**
F Company has entered into a take-or-pay contract with an ammonia plant. F is obligated to purchase 50 percent of the planned capacity production of the plant each period while the debt used to finance the plant remains outstanding. The monthly payment equals the sum of 50 percent of raw material costs, operating expenses, depreciation, interest on the debt used to finance the plant, and a return on the owner's equity investment.

F's disclosure might be as follows:

To assure a long-term supply, the company has contracted to purchase half the output of an ammonia plant through the year 2005 and to make minimum annual payments as follows, whether or not it is able to take delivery (in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>19X2 through 19X6 ($6,000 per annum)</td>
<td>$30,000</td>
</tr>
<tr>
<td>Later years</td>
<td>$120,000</td>
</tr>
<tr>
<td>Total</td>
<td>$150,000</td>
</tr>
<tr>
<td>Less: Amount representing interest</td>
<td><em>(65,000)</em></td>
</tr>
<tr>
<td>Total at present value</td>
<td><em>$85,000</em></td>
</tr>
</tbody>
</table>

In addition F must reimburse the owner of the plant for a proportional share of raw material costs and operating expenses of the plant. F's total purchases under the agreement were (in thousands) $7,000, $7,100, and $7,200 in 19X9, 19X0, and 19X1, respectively.
*not required disclosure
DISCLOSURES ABOUT FAIR VALUE OF FINANCIAL INSTRUMENTS — ASC 820

ASC 820 requires all entities to disclose the fair value of many financial instruments. These disclosures are for both assets and liabilities and also include financial instruments not shown on the balance sheet ("off-balance-sheet"). Examples include accounts, notes, loans receivable and payable, investment securities, options, standby letters of credit and financial guarantees and bonds.

If it is not practical to estimate these fair values, descriptive information about the financial instruments such as the terms of the instrument and why it is not possible to estimate the fair value should be provided.

It is important to note that the disclosure of fair values are provided as supplemental information and do not normally replace the historical cost basis used on the balance sheet. (An exception to this traditional reliance on historical cost is the valuing of certain investments in debt and equity securities at fair market value. See ASC 320 in chapter 2).

ASC 820 requires disclosure of information about significant concentrations of risk for all financial instruments. Concentrations of credit exist when a company has a business activity, economic characteristic, or location that is common to most of its financial instruments.

ASC 820 lists a number of items that are covered in other standards and are exempted from coverage by this standard: obligations for pension and other post-retirement benefits, employee stock option and deferred compensation plans, substantially extinguished debt and the related assets in trust, many insurance contracts, lease contracts, obligations and rights resulting from warranties, unconditional purchase obligations, equity method investments, minority interests in consolidated statements, and instruments classified as stockholders' equity on the balance sheet.

ASC 825, Exemption from Certain Required Disclosures about Financial Instruments for Certain Nonpublic Entities, amends ASC 820, Disclosures about Fair Value of Financial Instruments, to make such disclosures optional for entities that are nonpublic, have total assets of less than $100 million, and have not held or issued any derivative financial instruments, other than loan commitments, during the reporting period.

DERIVATIVES – BACKGROUND

Derivatives are financial devices that “derive” their value from other financial instruments.

Examples of derivatives are futures contracts, forward contracts, interest rate swaps and put options.

Derivatives may be freestanding or embedded in a host contract that is itself not a derivative. The combination of a host contract and an embedded derivative is a hybrid instrument.

A common example of an embedded derivative is the conversion feature of convertible debt. It represents a call option on the issuer’s stock.
ASC 815 – ACCOUNTING FOR DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

The pronouncement addresses the accounting for derivative instruments including certain derivative instruments embedded in other contracts, and hedging activities.

Fundamental Decisions
a. Derivative instruments that meet the definition of assets and liabilities should be reported in the financial statements.
b. Fair value is the only relevant measure for derivative instruments.

types of derivative instruments
a. Fair value hedges of assets, liabilities & commitments.
b. Cash flow hedges.
c. Foreign currency hedges.

Gains or Losses on Derivative Instruments
a. Fair Value Hedges: Gains or losses on fair value hedges are recognized in current earnings.
b. Cash Flow Hedges: Gains or losses on cash flow hedges are reported as a component of comprehensive income because the gain or loss on the hedged item will not occur until a future period. The other comprehensive income will be reclassified to income when the gain or loss on the transaction is recognized in earnings.
c. Foreign Currency Hedges:
   1. Gains or losses on hedged firm commitments are recognized currently.
   2. Gains or losses on hedged assets and liabilities are recognized currently.
   3. Gains or losses on hedges of available-for-sale securities are recognized currently.
   4. Gains or losses on hedges of forecasted foreign-currency-denominated transactions are reported as a component of comprehensive income and reclassified to earnings when the transaction is complete. These hedges are considered cash flow hedges.
   5. Gains or losses on hedging of a net investment in a foreign operation are reported in comprehensive income as part of the translation adjustment.

Note: Foreign currency hedges are covered in Chapter Six.

Embedded Derivatives
a. Embedded derivatives must be accounted for separately from the related host contract if the following conditions are met:
   1. The economic characteristics and risks of the embedded derivative instrument are not clearly and closely related to the economic characteristics of the host.
   2. The hybrid instrument is not remeasured at fair value under otherwise applicable GAAP, with changes in fair value reported in earnings as they occur.
   3. A freestanding instrument with the same terms as the embedded derivative would be subject to the requirements of ASC 815.
b. If an embedded derivative is accounted for separately, the host contract is accounted for based on the accounting standards that are applicable to instruments of its type. The separated derivative should be accounted for under ASC 815. If separating the two instruments is impossible, the entire contract must be measured at fair value, with gains and losses recognized in earnings. It may not be designated as a hedging instrument because nonderivatives usually do not qualify as hedging instruments.
Disclosures
a. Disclose the objectives for holding or issuing derivative instruments.
b. Disclose the context needed to understand these objectives.
c. Disclose the strategies for achieving these objectives.
d. Risk management policies.
e. Details about fair value hedges, cash flow hedges, and hedges of a net investment in a foreign operation.

FASB Definition of Derivative Instruments
A derivative instrument is a financial instrument or other contract with all three of the following characteristics:
a. It has: (1) one or more underlyings and (2) one or more notional amounts or payment provisions or both. Those terms determine the amount of the settlement or settlements, and, in some cases, whether or not a settlement is required.
b. It requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.
c. Its terms require or permit net settlement. It can readily be settled net by a means outside the contract, or it provides for delivery of an asset that puts the recipient in a position not substantially different from net settlement.

Definitions of Underlying, Notional Amount, and Payment Provisions:
a. An underlying is a specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, or other variable. An underlying may be a price or rate of an asset or liability but is not the asset or liability itself.
b. A notional amount is a number of currency units, shares, bushels, pounds, or other units specified in the contract. The settlement of a derivative instrument with a notional amount is determined by interaction of that notional amount with the underlying. The interaction may be simple multiplication, or it may involve a formula with leverage factors or other constants.
c. A payment provision specifies a fixed or determinable settlement to be made if the underlying behaves in a specified manner.

Example: FAIR VALUE HEDGE
ABC Company has an inventory of 1,000,000 pounds of a commodity called widgets which has a cost of $.48 per pound. The company hedges the fair value of its inventory by selling a futures contract on September 1, 1999 for 1,000,000 pounds at $.63 per pound for delivery on March 1, 2000. The following table lists the market rates and the company's estimates of the changes in the fair value of its inventory.

<table>
<thead>
<tr>
<th>DATE</th>
<th>SPOT RATE</th>
<th>FUTURE RATE FOR MARCH 1 DELIVERY</th>
<th>CHANGE IN VALUE OF INVENTORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1, 1999</td>
<td>.61</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>December 31, 1999</td>
<td>.59</td>
<td>.61</td>
<td>$22,000 loss</td>
</tr>
<tr>
<td>March 1, 2000</td>
<td>.62</td>
<td>.62</td>
<td>$31,000 gain</td>
</tr>
</tbody>
</table>

On March 1, 2000, ABC bought a futures contract for 1,000,000 pounds of widgets at $.62 per pound which offsets the company's sale of the futures contract on September, 1999 and closes its futures position. ABC sold its inventory on March 1, 2000 at the market rate of $.63 per pound.
Journal Entries:

1999, September 1
No journal entry because the futures rate of $.63 per pound and the fair value are the same and the futures contract is an executory contract.

1999, December 31
JE  Loss on Inventory  20,000
     Inventory – widgets  20,000
To record the company's estimate of the inventory loss.

1999, December 31
Received from broker  20,000
     Gain on futures contract  20,000

*ABC has a futures sale for a contract price of $.63 per pound but could theoretically buy a contract on December 31 to deliver the widgets for $.61 per pound for a net gain of $.02 per pound x 1,000 pounds or $20,000.

2000, March 1
JE  Inventory – widgets  31,000
     Gain on Inventory  31,000
JE  Loss on futures contract  10,000
     Receivable from broker  10,000

ABC has a futures sale for a contract price of $.63 per pound and buys a contract to settle the futures obligation for $.62 per pound for a net gain of $.01 per pound or a total gain of $10,000. Since the company anticipated a $20,000 gain on December 31, 1999, the company must recognize a $10,000 loss on March 1, 2000 in order to recognize a total gain of $10,000.

2000, March 1
JE  Accounts receivable  620,000
     Cost of goods sold  491,000
     Sales  620,000
     Inventory – widgets  491,000

To record sale and cost of goods sold.

Sale = 1,000,000 pounds x $.62 = 620,000.

Cost of goods sold = 1,000,000 pounds x the original cost of $.48 per pound for a total cost of $480,000. The cost of $480,000 is reduced by the loss on the inventory in 1999 of $20,000 but increased by the year 2000's gain of $31,000 for a net cost of $491,000 ($480,000 - $20,000 + $31,000).

FAIR VALUE HEDGE – INTEREST RATE SWAP

ABC Inc. borrows $500,000 for 3 years at a fixed interest rate of 7% annually. On the same date, ABC enters into an interest rate swap in which the company receives a 7% fixed rate but pays a variable rate on $500,000 based on an agreed upon standard index for interest rates. ABC designates the interest swap as a fair value hedge of the risks associated with a change in market interest rates. Assuming that the hedge meets the criteria for an effective hedge, changes in fair values of the interest rate swap will be used to measure the changes in the fair value of the debt.
The following table lists the changes in fair value of the debt and the variable interest rates from the agreed-upon index.

<table>
<thead>
<tr>
<th>DATE</th>
<th>FAIR VALUE OF DEBT</th>
<th>FAIR VALUE OF INTEREST RATE SWAP</th>
<th>INDEX VARIABLE INTEREST RATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 31, 2000</td>
<td>500,000</td>
<td>-0-</td>
<td>6.2%</td>
</tr>
<tr>
<td>Dec. 31, 2001</td>
<td>480,000</td>
<td>$20,000 loss</td>
<td>6.8%</td>
</tr>
<tr>
<td>Dec. 31, 2002</td>
<td>505,000</td>
<td>$5,000 gain</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

**Journal entries:**

- **Dec. 31, 2000**
  - Cash 500,000
  - Notes Payable 500,000
  - To record the borrowing

- **Dec. 31, 2001**
  - Interest Expense 35,000
  - Cash 35,000
  - To record the annual interest of $500,000 x 7% = $35,000.

- **Dec. 31, 2001**
  - Cash 4,000
  - Interest expense 4,000
  - On the interest rate swap, ABC receives 7% of $500,000 or $35,000 and pays the variable rate of 6.2% x $500,000 or $31,000, for a net decrease in interest expense of $4,000.

- **Dec. 31, 2001**
  - Notes payable 20,000
  - Gain from hedge 20,000
  - The year-end increase in interest rates reduced the debt's fair value.

- **Dec. 31, 2001**
  - Loss from hedge 20,000
  - Interest rate swap contract 20,000
  - To record the decrease in value of the interest rate swap.

- **Dec. 31, 2002**
  - Interest Expense 35,000
  - Cash 35,000
  - To record annual interest cost.

- **Dec. 31, 2002**
  - Cash 1,000
  - Interest Expense 1,000
  - ABC receives $35,000 from the fixed rate and pays 6.8% x $500,000 or $34,000 for the variable rate, for a net decrease in interest expense of $1,000.
Dec. 31, 2002  
**Loss from hedge**  
**Notes payable**

25,000
25,000

The decrease in interest rates to 6% increased the debts fair value from $480,000 to $505,000, for a loss of $25,000.

Dec. 31, 2002  
**Interest rate swap**

25,000

**Gain from hedge**

25,000

To record increase in value of the hedge from a loss of $20,000 to a gain of $5,000, for a total of $25,000.

---

**CASH FLOW HEDGE – Forecasted Transaction**

On January 1, 1999, XYZ Company decides that it will purchase 200,000 pounds of commodity A on July 1, 2000 at the spot rate. The company further decides to purchase a futures contract for 200,000 pounds of commodity A at the June 30 futures price of $2.50 per pound to hedge the forecasted transaction. The effectiveness of the hedge will be measured by the changes in the cash flows of forecasted purchase vs. the changes in the fair value of the futures contract. On June 30, 1999, XYZ purchases 200,000 pounds of commodity A at $2.60 per pound.

**Journal Entries:**

**June 1, 1999**

No journal entry because the futures contract is at the spot rate which is the fair value. (For simplicity, margin deposits are ignored.)

**June 30, 1999**

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory – Commodity A</td>
<td>520,000</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td>520,000</td>
</tr>
</tbody>
</table>

To record the purchase of 200,000 pounds of commodity A at $2.60 per pound.

**June 30, 1999**

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Futures Contract (Asset)</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Gain on hedge – other Comprehensive Income</td>
<td></td>
<td>20,000</td>
</tr>
</tbody>
</table>

The gain is the difference between the current rate of $2.60 per pound and the futures contract price of $2.50 per pound of $.10 x 200,000 pounds or $20,000.

**June 30, 1999**

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Futures contract (Asset)</td>
<td></td>
<td>20,000</td>
</tr>
</tbody>
</table>

To record the net cash settlement of the futures contract.

**Author's Note:** For an example using a put option instead of a futures contract, see Chapter 6 on Foreign Currency.
CONTINGENCIES—ASC 450

Summary
If the contingency is probable or likely to occur, and both of the following conditions are present, the contingency loss should be recognized.
1. It is probable that an asset has been impaired or a liability incurred at the balance sheet date, and
2. The amount of loss can be reasonably estimated.

In such cases, an adjustment should be made and the contingency loss recognized.
If the chance of occurrence is only reasonably possible or less than likely, disclosure should be made.
If the event is probable but the amount of loss cannot be reasonably estimated, disclosure should be made.

Definitions
Contingency. A situation involving uncertainty as to possible loss that will be resolved when one or more future events occur or fail to occur. Examples are: Litigation, threat of expropriation, collectibility of receivables, claims arising from product warranties or product defects, self-insured risks, and possible catastrophe losses of property and casualty insurance companies.

Probable. The future event or events are likely to occur.

Reasonably possible. The chance of occurrence is more than remote but less than likely.

Remote. The chance of occurrence is slight.

Conditions Required for Recognition of Contingency Loss
1. It must be probable that an asset has been impaired or a liability incurred at the date of the financial statements.
   It must be probable that a future event or events confirming the fact of loss will occur.
2. The amount of loss can be reasonably estimated.

Examples of loss contingencies included:
   a. Collectibility of receivables.
   b. Obligations related to product warranties and product defects.
   c. Risk of loss or damage of enterprise property by fire, explosion, or other hazards.
   d. Threat of expropriation of assets.
   e. Pending or threatened litigation.
   f. Actual or possible claims and assessments.
   g. Risk of loss from catastrophes assumed by property and casualty insurance companies including reinsurance companies.
   h. Guarantees of indebtedness of others.
   i. Obligations of commercial banks under "standby letters of credit."
   j. Agreements to repurchase receivables (or to repurchase the related property) that have been sold.

Estimation of the Amount of a Loss
Where it is probable that an asset has been impaired or a liability incurred, the amount of loss estimable is within a range of amounts. If so, the provision for loss should be:
   a. The amount within the range that appears to be the best estimate of loss, or
   b. Where no amount is a better estimate than any other, the minimum amount in the range should be accrued.

Example: Hokum, Inc., has been involved in litigation and it is probable that an unfavorable verdict will result in payment of damages between $3 million and $9 million. No amount in the range appears to be a better estimate than any other amount. A loss of $3 million should be accrued for the year, the minimum amount of the range of estimated loss. Disclosure of the nature of the contingency and the exposure to an additional amount of loss of up to $6 million should be made.
Disclosure
If no accrual is made for a loss contingency because one or both of the conditions for accrual are not met, disclosure should be made when there is at least a reasonable possibility that a loss may have been incurred. The disclosure should include the nature of the contingency, an estimate of the probable loss or range of loss, or state that such an estimate cannot be made.

Examples of situations that normally meet the conditions for accrual are losses from uncollectible receivables and obligations related to product warranties and product defects. Conversely, accrual for loss or damage of property, loss from injury to others, damage to property of others and business interruption (sometimes called self-insured risks) should not be made until the loss has taken place.

Self-Insured Risks
The mere absence of insurance does not fulfill the requirements for accrual. Casualties are random in their occurrence and there is no diminution in the value of the property until the event has occurred.

Earnings Variability
Some have advocated the recognition of estimated losses from contingencies without regard to whether it is probable that an asset has been impaired or a liability incurred to avoid reporting net income that fluctuates widely from period to period. The FASB concluded that "financial statement users have indicated that information about earnings variability is important to them." If the nature of an enterprise's operations is such that irregularities in the incurrence of losses cause variations in periodic net income, that fact should not be obscured by accruing for anticipated losses that do not relate to the current period.

Gain Contingencies
These should not be recognized, since to do so might be to recognize revenue prior to its realization. Disclosure should be made, but care exercised to avoid misleading implications as to the likelihood of realization.

General or Unspecified Business Risks
So-called "reserves for general contingencies" or similar type reserves do not meet the criteria for accrual. These type reserves or other appropriations of retained earnings should not be shown outside the Stockholders' Equity section of the balance sheet and losses should not be charged to appropriations of retained earnings. The only proper disposition of an appropriation (reserve) of retained earnings, contingency or otherwise, is reversal.

Remote Contingencies
Even though the possibility of loss is remote, disclosure of certain types of loss contingencies which are now being disclosed should be continued. These are: guarantees of indebtedness of others, obligations of commercial banks under "standby letters of credit," and guarantees to purchase receivables that have been sold or otherwise assigned. Disclosure of these type contingencies and others that have the same characteristics should be continued.

ASC 275: DISCLOSURE OF CERTAIN SIGNIFICANT RISKS AND UNCERTAINTIES
BACKGROUND: The FASB in ASC 825 required the disclosure of information about significant concentrations of risk for all financial instruments.

The SOP uses two terms that should be defined:
- Near term – a period of time not to exceed one year from the date of the financial statements.
- Severe impact – the threshold is higher than that of materiality, yet lower than that of catastrophic in nature.
The additional disclosures are in four areas:
• Nature of operations
• Use of estimates in the preparation of financial statements
• Certain significant estimates
• Current vulnerability due to certain concentrations

Nature of Operations
GAAP requires that users of financial statements be informed about the following specific areas of operations (these disclosures do not have to be quantified):
• Description of the major products and/or services provided by the Company.
• Principle markets and locations of the markets.
• Relative importance of the operations of each (line of) business and the basis for such a determination (sales, asset commitment, income, etc.)

Use of Estimates in the Preparation of Financial Statements
This is a general disclosure that puts users on notice that preparation of financial statements requires the use of estimates on the part of management.

Certain Significant Estimates
In this area the GAAP requires a significant increase in disclosure responsibilities in financial statements. Disclosure may have to be made regarding estimates that are not required under current first-level GAAP.

Two Tests
Estimates used in the preparation of financial statements are subject to the following two tests:
1. Could it be at least reasonably possible that the estimate of the effect on the financial statements of the estimate (at the financial statement date) in question will change in the near-term due to one or more future confirming events?
2. Would that potential change have a material effect on the financial statements?

Disclosures
Such disclosure surrounding estimates meeting the criteria should, at a minimum, include (where applicable):
• The nature of the uncertainty.
• An indication that it is at least reasonably possible that one or more of the confirming events may occur.
• If this is a potential loss contingency (ASC 450), there should be an estimate of the potential loss or a statement that such an estimate is not possible. (It is encouraged, but not required, to include the factors that make the estimation especially subject to change.)
• Disclosure of risk reduction techniques employed by the Company is encouraged, not required.

Examples
The GAAP offers numerous examples of assets and/or liabilities that involve estimation, and may need to be disclosed under this requirement. Some of those examples include:
• Inventories
• Specialized equipment
• Certain valuation allowances
• Litigation related obligations

Conditions
The GAAP also offers examples of conditions that might indicate those areas that are particularly sensitive:
• A significant decrease in the market value of an asset.
• A change (perhaps brought on by technology) in the usage of a particular asset.
• Changing legal environment.
• Significant cost over-runs.
• A continuing loss trend.
Current Vulnerability Due to Certain Concentrations
The idea of disclosing areas of potential exposure from concentrations was introduced in ASC 825 and is expanded in ASC 275.

GAAP addresses those concentrations (defined below) that meet each of the following three criteria:
1. The concentration exists at the balance sheet date.
2. The concentration subjects the Company to potential near-term risk (potentially severe-impact).
3. It is at least reasonably possible that the adverse events could occur that would cause the severe-impact condition.

Concentration
There are four defined concentrations for purposes of this disclosure:

a. Volume of business transacted with any customer, supplier, lender, grantor, or creditor.
b. Product or service revenue generation.
c. Available sources of supply, labor, services, material, licenses and/or other rights used in operations.
d. Market and/or geographic areas in which the Company conducts business.

Concentrations – Labor Supply
Concentrations related to labor supply subject to collective bargaining must disclose the following: Percentage of labor force
• Covered by collective bargaining.
• Under agreements that will expire within a one-year period.

Concentration – Outside of Entity’s Home Country
Concentrations related to operations outside of the entity’s home country must disclose the carrying amounts of net assets and geographic areas in which the assets are located.

Concentrations related to financial instruments, and concentrations other than described above are not subject to the SOP provisions.

See Appendix for Example of ASC 275 Disclosure.

ESTIMATED LIABILITIES
The CPA exam often includes questions regarding liabilities which must be accrued due to obligations incurred in the company's operations. Such liabilities include obligations for gift certificates, coupon and premium offers, deposits, trading stamps, warranties, and similar items. The expense recognition and resulting liability balance is usually based upon estimates of occurrences which are matched with the recognition of revenues.

Example #1: In packages of its products, Curran Co. includes coupons that may be presented at retail stores to obtain discounts on other Curran products. Retailers are reimbursed for the face amount of coupons redeemed plus 10% of that amount for handling costs. Curran honors requests for coupon redemption by retailers up to three months after the consumer expiration date. Curran estimates that 70% of all coupons issued will ultimately be redeemed. Information relating to coupons issued by Curran during the current year is as follows:

<table>
<thead>
<tr>
<th>Consumer expiration date</th>
<th>12/31/XX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total face amount of coupons issued</td>
<td>$600,000</td>
</tr>
<tr>
<td>Total payments to retailers as of the end of the current year</td>
<td>220,000</td>
</tr>
</tbody>
</table>

The company must recognize $462,000 as the expense of the coupon offer which is matched against the revenues which were recognized from the sale of the product which contain the coupons. Since $220,000 has already been paid, the remaining $242,000 is the remaining liability at year end.

\[ \text{Expense} = \$600,000 \times 70\% - 10\% \times \$420,000 = \$462,000 \]
Example #2: Marr Co. sells its products in reusable containers. The customer is charged a deposit for each container delivered and receives a refund for each container returned within two years after the year of delivery. Marr accounts for the containers not returned within the time limit as being retired by sale at the deposit amount. Information for 1999 is as follows:

Container deposits at December 31, 1998, from deliveries in:

<table>
<thead>
<tr>
<th>Year</th>
<th>Deposits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>$150,000</td>
</tr>
<tr>
<td>1998</td>
<td>430,000</td>
</tr>
<tr>
<td></td>
<td>$580,000</td>
</tr>
</tbody>
</table>

Deposits for containers delivered in 1999 780,000

Deposits for containers returned in 1999 from deliveries in:

<table>
<thead>
<tr>
<th>Year</th>
<th>Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>$90,000</td>
</tr>
<tr>
<td>1998</td>
<td>250,000</td>
</tr>
<tr>
<td>1999</td>
<td>286,000</td>
</tr>
<tr>
<td></td>
<td>$626,000</td>
</tr>
</tbody>
</table>

At December 31, 1999, the liability for deposits on returnable containers would appear as follows:

<table>
<thead>
<tr>
<th>Deposit Liability Account</th>
<th>12/31/98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance</td>
<td>$580,000</td>
</tr>
<tr>
<td>1999 returns</td>
<td>780,000</td>
</tr>
<tr>
<td>1997 deposits not returned</td>
<td>60,000</td>
</tr>
<tr>
<td></td>
<td>$674,000</td>
</tr>
</tbody>
</table>

CLASSIFICATION OF SHORT-TERM OBLIGATIONS—ASC 405

SUMMARY

Short-term obligations such as trade accounts payable and normal accrued liabilities should always be classified as current. Other short-term obligations (maturing within one year) must also be classified as current unless the company intends to and has the ability to refinance such obligations within one year. Ability to refinance must be demonstrated by either accomplishing the refinancing or entering into an agreement to do so before the balance sheet is issued.

Criteria For Current Liability Classification

Short-term obligations arising from transactions in the normal course of business that are due in customary terms shall be classified as current liabilities. Examples are obligations for items which have entered into the operating cycle, such as payables incurred in the acquisition of materials and supplies to be used in the production of goods or in providing services to be offered for sale; collections received in advance of the delivery of goods or performance of services; and debts which arise from operations directly related to the operating cycle, such as accruals for wages, salaries, commissions, rentals, royalties, and income and other taxes.

Criteria For Exclusion as a Current Liability

1. The enterprise intends to refinance the obligation on a long-term basis, and
2. The enterprise's intent to refinance on a long-term basis is supported by an ability to consummate the refinancing demonstrated in either of the following ways:
   a. Post-balance-sheet-date issuance of a long-term obligation or equity securities. After the date of an enterprise's balance sheet but before that balance sheet is issued, a long-term obligation or equity securities have been issued for the purpose of refinancing the short-term obligation on a long-term basis; or
b. Financing agreement. Before the balance sheet is issued, the enterprise has entered into a financing agreement that clearly permits the enterprise to refinance the short-term obligation on a long-term basis on terms that are readily determinable, and all of the following conditions are met:

(1) The agreement does not expire within one year or within the operating cycle, if greater, from the date of the enterprise's balance sheet. Further, during that period the agreement cannot be cancelable by the lender or the prospective lender or investor except for violation of a provision with which compliance is objectively determinable or measurable. Additionally, obligations incurred under the agreement cannot be callable during that period.

(2) No violation of any provision in the financing agreement exists at the balance-sheet date and no available information indicates that a violation has occurred thereafter but prior to the issuance of the balance sheet, or, if one exists at the balance-sheet date or has occurred thereafter, a waiver has been obtained.

(3) The lender or the prospective lender or investor with which the enterprise has entered into the financing agreement is expected to be financially capable of honoring the agreement.

Disclosure
The total of current liabilities shall be presented in classified balance sheets. If a short-term obligation is excluded from current liabilities pursuant to the provisions of this Statement, the notes to the financial statements shall include a general description of the financing agreement and the terms of any new obligation incurred or expected to be incurred or equity securities issued or expected to be issued as a result of a refinancing.

CLASSIFICATION OF CALLABLE OBLIGATIONS—ASC 405
In determining the classification of debt for balance-sheet and/or disclosure purposes, the following should be classified as current:
1. Demand obligations or those which will become demand within one year from the balance sheet date.
2. Long-term obligations which are callable by the lender because of a violation of the debt agreement.

Exceptions include:
   a. When the creditor has waived or lost the right to demand repayment within one year.
   b. When the long-term obligation includes a grace period for curing the violation and it is probable that such violation will be cured prior to the end of the grace period.

Accounting for Certain Financial Instruments With Characteristics of Both Liabilities and Equity (ASC 480)

Background
Many entities issue and have outstanding financial instruments with characteristics of both equity and liabilities. Examples include common and preferred stock with mandatory redemption provisions and put warrants and forward contracts involving ownership of the entity. Some of these instruments have been recorded in equity or may have been off balance sheet. ASC 480 requires that the following freestanding financial instruments be recorded as liabilities:

- Mandatorily redeemable financial instruments.
- Obligations to repurchase the issuer’s equity shares (or other ownership interest) by transferring assets.
- Certain obligations to issue a variable number of shares.

Mandatorily Redeemable Financial Instruments
A mandatorily redeemable financial instrument that has an unconditional obligation requiring the issuer to redeem the instrument must be recorded as liability if the obligation requires the transfer of assets at a specified date or upon an event certain to occur. (There is an exception to this provision if the redemption is only required upon liquidation or termination of the entity.) If the obligation is conditional upon an event not certain to occur, it shall be recorded as a liability at the time the event occurs or becomes certain to occur.
Examples include:

- A company issues shares of stock to an employee that are required to be redeemed by the company upon death or termination of employment of the employee. These events are certain to occur and, therefore, the stock is classified as a liability. **Note that this covers many stockholder buy/sell agreements that have mandatory redemption provisions.**

- A company issues shares of stock to an employee that are required to be redeemed one year after a change of control in the company. Since this event is not certain to occur, the stock is initially included in equity. Upon a change in control, the redemption becomes certain and is then reclassified as a liability.

**Obligations to Repurchase the Issuer’s Equity Shares by Transferring Assets**

A financial instrument, other than an outstanding share, shall be classified as a liability if, at inception, it meets the following criteria:

1. It contains an obligation to repurchase the issuer’s equity shares, and
2. Requires or may require the issuer to transfer assets to settle the obligation.

Examples include:

- **Put Option**—a freestanding written option requiring the entity to repurchase its shares if the option is put back to the entity.

- **Forward Purchase Contract**—a company enters into a forward contract with another entity to buy back a fixed amount of the company’s share at a specified future date at a specified price.

**Obligations to Issue a Variable Number of Shares**

A financial instrument that contains an unconditional obligation, or a financial instrument other than an outstanding share that contains a conditional obligation, that the issuer must or may settle by issuing a variable number of its equity shares shall be classified as a liability if, at inception, the monetary value of the obligation is based solely or predominantly on any of the following:

- A fixed monetary amount noted at inception.

- Variations in something other than the fair value of the issuer’s equity shares.

- Variations inversely related to changes in the fair value of the issuer’s equity shares.

**Measurement**

Mandatorily redeemable financial instruments shall be initially measured at fair value.

**ASC 420, Costs Associated with Exit or Disposal Activities**

1. An exit activity includes restructurings (e.g., sale or termination of a line of business, closure of an activity in a given location, relocation, changes in management structure, or a fundamental reorganization of operations).

2. Disposal activities involve disposal (e.g., by sale) of groups of long-lived assets in one transaction.

3. Examples of costs that are subject to ASC 420 are one-time termination benefits provided to involuntarily terminated employees, contract termination costs other than those for a capital lease, and other costs, such as facilities consolidation and employee relocation costs.

4. A liability for exit or disposal costs is ordinarily recognized and measured initially at fair value **when the liability is incurred.** If fair value cannot be reasonably estimated, the liability is recognized when fair value can be reasonably estimated. Fair value is the amount at which the exit or disposal costs could be settled between willing parties, not in a forced or liquidation transaction. A quoted price in an active market is the best evidence of fair value.
Appendix

ASC 275: DISCLOSURE OF CERTAIN SIGNIFICANT RISKS AND UNCERTAINTIES

Companies are required to disclose information about the nature of their operations, the use of estimates in preparing financial statements, certain significant estimates, and vulnerabilities due to certain concentrations. An example of such a disclosure is provided below.

<table>
<thead>
<tr>
<th>Chesapeake Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risks and Uncertainties:</strong> Chesapeake operates in three business segments which offer a diversity of products over a broad geographic base. The Company is not dependent on any single customer, group of customers, market, geographic area or supplier of materials, labor or services. Financial statements include, where necessary, amounts based on the judgments and estimates of management. These estimates include allowances for bad debts, accruals for landfill closing costs, environmental remediation costs, loss contingencies for litigation, self-insured medical and workers’ compensation insurance and income taxes and determinations of discount and other rate assumptions for pensions and postretirement benefit expenses.</td>
</tr>
</tbody>
</table>
IFRS - Bonds, Accounting for Debt

**Bonds**
The accounting for bonds is essentially the same as US GAAP. The major difference is that convertible bonds are split into an equity piece and a liability portion. The conversion feature is considered a part of equity..

**Contingencies**
The accounting for contingencies is very similar to US GAAP with some minor differences. Probable is defined as "more likely than not", which usually defined as a probability of 50% or above. A contingency that is probable and can be reasonably estimated is called a provision under IFRS and other possible obligation that are not accrued as "contingent liabilities."

If a "provision" is estimated using a range, IFRS requires the accrual of the midpoint of the range whereas in US GAAP the lower end of the range is accrual.

<table>
<thead>
<tr>
<th>Fast Track Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>IFRS</strong></td>
</tr>
<tr>
<td>Convertible Bonds</td>
</tr>
<tr>
<td>Terminology Contingencies</td>
</tr>
<tr>
<td>Define Probable</td>
</tr>
<tr>
<td>Accrue a range</td>
</tr>
</tbody>
</table>
Chapter Nine  
Bonds, Accounting for Debt  
Questions

**ISSUANCE OF BONDS**

1. The market price of a bond issued at a discount is the present value of its principal amount at the market (effective) rate of interest  
   a. Less the present value of all future interest payments at the market (effective) rate of interest.  
   b. Less the present value of all future interest payments at the rate of interest stated on the bond.  
   c. Plus the present value of all future interest payments at the market (effective) rate of interest.  
   d. Plus the present value of all future interest payments at the rate of interest stated on the bond.

2. The following information pertains to Camp Corp.’s issuance of bonds on July 1, 1998:  
   Face amount $800,000  
   Terms 10 years  
   Stated interest rate 6%  
   Interest payment dates Annually on July 1  
   Yield 9%  
   Present value of 1 for 10 periods 0.558 0.422  
   Future value of 1 for 10 periods 1.791 2.367  
   Present value of ordinary annuity of 1 for 10 periods 7.360 6.418  
What should be the issue price for each $1,000 bond?  
   a. $1,000  
   b. $864  
   c. $807  
   d. $700

3. The issue price of a bond is equal to the present value of the future cash flows for interest and principal when the bond is issued

<table>
<thead>
<tr>
<th></th>
<th>At par</th>
<th>At a discount</th>
<th>At a premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>b.</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>c.</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

4. On July 1, 2001, Eagle Corp. issued 600 of its 10%, $1,000 bonds at 99 plus accrued interest. The bonds are dated April 1, 2001 and mature on April 1, 2011. Interest is payable semiannually on April 1 and October 1. What amount did Eagle receive from the bond issuance?  
   a. $579,000  
   b. $594,000  
   c. $600,000  
   d. $609,000

5. On July 1, 1996, Howe Corp. issued 300 of its 10%, $1,000 bonds at 99 plus accrued interest. The bonds are dated April 1, 1996, and mature on April 1, 2006. Interest is payable semiannually on April 1 and October 1. What amount did Howe receive from the bond issuance?  
   a. $304,500  
   b. $300,000  
   c. $297,000  
   d. $289,500

**BOND ISSUE COST**

6. During 1999, Lake Co. issued 3,000 of its 9%, $1,000 face value bonds at 101½. In connection with the sale of these bonds, Lake paid the following expenses:  
   Promotion costs $ 20,000  
   Engraving and printing 25,000  
   Underwriters’ commissions 200,000  
What amount should Lake record as bond issue costs to be amortized over the term of the bonds?  
   a. $0  
   b. $220,000  
   c. $225,000  
   d. $245,000

   a. $220  
   b. $240  
   c. $495  
   d. $3,300

9Q-1
INTEREST EXPENSE AND AMORTIZATION OF BOND DISCOUNT OR BOND PREMIUM

8. On January 2, 2001, West Co. issued 9% bonds in the amount of $500,000, which mature on January 2, 2011. The bonds were issued for $469,500 to yield 10%. Interest is payable annually on December 31. West uses the interest method of amortizing bond discount. In its June 30, 2001, balance sheet, what amount should West report as bonds payable?
   a. $469,500  
   b. $470,475  
   c. $471,025  
   d. $500,000

9. On May 1, 1999, Bolt Corp. issued 11% bonds in the face amount of $1,000,000 that mature on May 1, 2009. The bonds were issued to yield 10%, resulting in bond premium of $62,000. Bolt uses the effective interest method of amortizing bond premium. Interest is payable semiannually on November 1 and May 1. In its October 31, 1999, balance sheet, what amount should Bolt report as unamortized bond premium?
   a. $62,000  
   b. $60,100  
   c. $58,900  
   d. $58,590

10. Webb Co. has outstanding a 7%, 10-year $100,000 face-value bond. The bond was originally sold to yield 6% annual interest. Webb uses the effective interest rate method to amortize bond premium. On June 30, 1999, the carrying amount of the outstanding bond was $105,000. What amount of unamortized premium on bond should Webb report in its June 30, 2000, balance sheet?
   a. $1,050.  
   b. $3,950.  
   c. $4,300.  
   d. $4,500.

11. On July 1, 1997, Day Co. received $103,288 for $100,000 face amount, 12% bonds, a price that yields 10%. Interest expense for the six months ended December 31, 1997, should be
   a. $6,197  
   b. $6,000  
   c. $5,164  
   d. $5,000

12. A bond issued on June 1, 2000, has interest payment dates of April 1 and October 1. Bond interest expense for the year ended December 31, 2000, is for a period of
   a. Three months.  
   b. Four months.  
   c. Six months.  
   d. Seven months.

13. On November 1, 2004, Mason Corp. issued $800,000 of its 10-year, 8% term bonds dated October 1, 2004. The bonds were sold to yield 10%, with total proceeds of $700,000 plus accrued interest. Interest is paid every April 1 and October 1. What amount should Mason report for interest payable in its December 31, 2004, balance sheet?
   a. $17,500  
   b. $16,000  
   c. $11,667  
   d. $10,667

14. On March 1, 1997, Clark Co. issued bonds at a discount. Clark incorrectly used the straight-line method instead of the effective interest method to amortize the discount. How were the following amounts, as of December 31, 1997, affected by the error?
<table>
<thead>
<tr>
<th>Bond carrying amount</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Overstated</td>
<td>Overstated</td>
</tr>
<tr>
<td>b. Understated</td>
<td>Understated</td>
</tr>
<tr>
<td>c. Overstated</td>
<td>Understated</td>
</tr>
<tr>
<td>d. Understated</td>
<td>Overstated</td>
</tr>
</tbody>
</table>

15. On June 30, 1999, King Co. had outstanding 9%, $5,000,000 face value bonds maturing on June 30, 2004. Interest was payable semiannually every June 30 and December 31. On June 30, 1999, after amortization was recorded for the period, the unamortized bond premium and bond issue costs were $30,000 and $50,000, respectively. On that date, King acquired all its outstanding bonds on the open market at 98 and retired them. At June 30, 1999, what amount should King recognize as gain before income taxes on redemption of bonds?
   a. $ 20,000  
   b. $ 80,000  
   c. $120,000  
   d. $180,000
16. On July 31, 2000, Dome Co. issued $1,000,000 of 10%, 15-year bonds at par and used a portion of the proceeds to call its 600 outstanding 11%, $1,000 face value bonds, due on July 31, 2010, at 102. On that date, unamortized bond premium relating to the 11% bonds was $65,000. In its 2000 income statement, what amount should Dome report as gain or loss, before income taxes, from retirement of bonds?
   a. $ 53,000 gain.
   b. $0.
   c. $(65,000) loss.
   d. $(77,000) loss.

17. In open market transactions, Oak Corp. simultaneously sold its long-term investment in Maple Corp. bonds and purchased its own outstanding bonds. The broker remitted the net cash from the two transactions. Oak’s gain on the purchase of its own bonds exceeded its loss on the sale of Maple’s bonds. Oak should report the
   a. Net effect of the two transactions as an extraordinary gain.
   b. Net effect of the two transactions in income before extraordinary items.
   c. Effect of its own bond transaction gain in income before extraordinary items, and report the Maple bond transaction as an extraordinary loss.
   d. Effect of its own bond transaction as an ordinary gain, and report the Maple bond transaction loss in income before extraordinary items.

**CONVERTIBLE BONDS**

18. On June 30, 1996, Hamm Corp. had outstanding $2,000,000 face amount of 8% convertible bonds maturing on June 30, 2001. Interest is payable on June 30 and December 31. Each $1,000 bond is convertible into 40 shares of Hamm’s $20 par common stock. After amortization through June 30, 1996, the unamortized balance in the premium on bonds payable account was $50,000. On June 30, 1996, all of the bonds were converted when Hamm's common stock had a market price of $30 per share. Under the book value method, what amount should Hamm credit to additional paid-in capital in recording the conversion?
   a. $350,000
   b. $400,000
   c. $450,000
   d. $800,000

19. Clay Corp. had $600,000 convertible 8% bonds outstanding at June 30, 1997. Each $1,000 bond was convertible into 10 shares of Clay’s $50 par value common stock. On July 1, 1997, the interest was paid to bondholders, and the bonds were converted into common stock, which had a fair market value of $75 per share. The unamortized premium on these bonds was $12,000 at the date of conversion. Under the book value method, this conversion increased the following elements of the stockholders’ equity section by

<table>
<thead>
<tr>
<th>Common stock</th>
<th>Additional paid-in capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $300,000</td>
<td>$312,000</td>
</tr>
<tr>
<td>b. $306,000</td>
<td>$306,000</td>
</tr>
<tr>
<td>c. $450,000</td>
<td>$162,000</td>
</tr>
<tr>
<td>d. $600,000</td>
<td>$ 12,000</td>
</tr>
</tbody>
</table>

20. On April 30, 1995, Witt Corp. had outstanding 8%, $1,000,000 face amount, convertible bonds maturing on April 30, 1999. Interest is payable on April 30 and October 31. On April 30, 1995, all these bonds were converted into 40,000 shares of $20 par common stock. On the date of conversion:
   - Unamortized bond discount was $30,000.
   - Each bond had a market price of $1,080.
   - Each share of stock had a market price of $28.

Under the book value method, what amount should Witt record as a loss on conversion of bonds?
   a. $150,000
   b. $110,000
   c. $30,000
   d. $0

21. When bonds payable are converted into common stock, any gain or loss would be recognized when using the

<table>
<thead>
<tr>
<th>Book value method</th>
<th>Market value method</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
BOND ISSUED WITH STOCK WARRANTS

22. On December 30, 1999, Fort, Inc. issued 1,000 of its 8%, 10-year, $1,000 face value bonds with detachable stock warrants at par. Each bond carried a detachable warrant for one share of Fort's common stock at a specified option price of $25 per share. Immediately after issuance, the market value of the bonds without the warrants was $1,080,000 and the market value of the warrants was $120,000. In its December 31, 1999, balance sheet, what amount should Fort report as bonds payable?
   a. $1,000,000.
   b. $975,000.
   c. $900,000.
   d. $880,000.

23. Ray Corp. issued bonds with a face amount of $200,000. Each $1,000 bond contained detachable stock warrants for 100 shares of Ray's common stock. Total proceeds from the issue amounted to $240,000. The market value of each warrant was $2, and the market value of the bonds without the warrants was $196,000. The bonds were issued at a discount of
   a. $0.
   b. $678.
   c. $4,000.
   d. $33,898.

24. On March 1, 1999, Evan Corp. issued $500,000 of 10% nonconvertible bonds at 103, due on February 28, 2009. Each $1,000 bond was issued with 30 detachable stock warrants, each of which entitled the holder to purchase, for $50, one share of Evan’s $25 par common stock. On March 1, 1999, the market price of each warrant was $4. By what amount should the bond issue proceeds increase stockholders’ equity?
   a. $0
   b. $15,000
   c. $45,000
   d. $60,000

25. Roaster Company issued bonds with detachable stock warrants. Each warrant granted an option to buy one share of $40 par value common stock for $75 per share. Five hundred warrants were originally issued, and $4,000 was appropriately credited to "warrants." If 90% of these warrants are exercised when the market price of the common stock is $85 per share, how much should be credited to "capital in excess of par" on this transaction?
   a. $19,350.
   b. $19,750.
   c. $23,850.
   d. $24,250.

BOND TERMS

26. Blue Corp.’s December 31, 1991, balance sheet contained the following items in the long-term liabilities section:

<table>
<thead>
<tr>
<th>Debt Type</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>9¾% debentures</td>
<td>Callable in 2002, due in 2007</td>
<td>$700,000</td>
</tr>
<tr>
<td>9½% collateral trust bonds</td>
<td>Convertible into common stock beginning in 2000, due in 2010</td>
<td>$600,000</td>
</tr>
<tr>
<td>10% subordinated debentures</td>
<td>Maturing annually beginning in 1997</td>
<td>$300,000</td>
</tr>
</tbody>
</table>

What is the total amount of Blue’s term bonds?
   a. $600,000
   b. $700,000
   c. $1,000,000
   d. $1,300,000

27. Hancock Co.’s December 31, 1990, balance sheet contained the following items in the long-term liabilities section:

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsecured</td>
<td>9.375% registered bonds ($25,000 maturing annually beginning in 1994)</td>
<td>$275,000</td>
</tr>
<tr>
<td></td>
<td>11.5% convertible bonds, callable beginning in 1999, due 2010</td>
<td>$125,000</td>
</tr>
<tr>
<td>Secured</td>
<td>9.875% guaranty security bonds, due 2010</td>
<td>$250,000</td>
</tr>
<tr>
<td></td>
<td>10.0% commodity backed bonds ($50,000 maturing annually beginning in 1995)</td>
<td>$200,000</td>
</tr>
</tbody>
</table>
What are the total amounts of serial bonds and debenture bonds?

<table>
<thead>
<tr>
<th></th>
<th>Serial bonds</th>
<th>Debenture bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>$475,000</td>
<td>$400,000</td>
</tr>
<tr>
<td>b.</td>
<td>$475,000</td>
<td>$125,000</td>
</tr>
<tr>
<td>c.</td>
<td>$450,000</td>
<td>$400,000</td>
</tr>
<tr>
<td>d.</td>
<td>$200,000</td>
<td>$650,000</td>
</tr>
</tbody>
</table>

28. Witt Corp. has outstanding at December 31, 1996, two long-term borrowings with annual sinking fund requirements and maturities as follows:

<table>
<thead>
<tr>
<th>Sinking fund requirements</th>
<th>Maturities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>1997</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>1998</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>1999</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>2000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td></td>
<td>$8,000,000</td>
</tr>
<tr>
<td></td>
<td>$9,500,000</td>
</tr>
</tbody>
</table>

Disclosures of Bonds

28. Witt Corp. has outstanding at December 31, 1996, two long-term borrowings with annual sinking fund requirements and maturities as follows:

<table>
<thead>
<tr>
<th>Sinking fund requirements</th>
<th>Maturities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>1997</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>1998</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>1999</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>2000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td></td>
<td>$8,000,000</td>
</tr>
<tr>
<td></td>
<td>$9,500,000</td>
</tr>
</tbody>
</table>

In the notes to its December 31, 1996, balance sheet, how should Witt report the above data?

a. No disclosure is required.
b. Only sinking fund payments totaling $8,000,000 for the next five years detailed by year need be disclosed.
c. Only maturities totaling $9,500,000 for the next five years detailed by year need be disclosed.
d. The combined aggregate of $17,500,000 of maturities and sinking fund requirements detailed by year should be disclosed.

29. Included in Witt Corp.’s liability account balances at December 31, 1995, were the following:

14% note payable issued October 1, 1995, maturing September 30, 1996 $500,000
16% note payable issued April 1, 1993, payable in six equal annual installments of $200,000 beginning April 1, 1994 $800,000

Witt's December 31, 1995, financial statements were issued on March 31, 1996. On January 15, 1996, the entire $800,000 balance of the 16% note was refinanced by issuance of a long-term obligation payable in a lump sum. In addition, on March 10, 1996, Witt consummated a noncancelable agreement with the lender to refinance the 14%, $500,000 note on a long-term basis, on readily determinable terms that have not yet been implemented. Both parties are financially capable of honoring the agreement, and there have been no violations of the agreement's provisions. On the December 31, 1995 financial statements, what amount should Witt classify as short-term obligations?

a. $700,000
b. $500,000
c. $200,000
d. $0

30. On December 31, 1999, Largo, Inc. had a $750,000 note payable outstanding, due July 31, 2000. Largo borrowed the money to finance construction of a new plant. Largo planned to refinance the note by issuing long-term bonds. Because Largo temporarily had excess cash, it prepaid $250,000 of the note on January 12, 2000. In February 2000, Largo completed a $1,500,000 bond offering. Largo will use the bond offering proceeds to repay the note payable at its maturity and to pay construction costs during 2000. On March 3, 2000, Largo issued its 1999 financial statements. What amount of the note payable should Largo include in the current liabilities section of its December 31, 1999, balance sheet?

a. $750,000
b. $500,000
c. $250,000
d. $0

31. Cali, Inc., had a $4,000,000 note payable due on March 15, 2002. On January 28, 2002, before the issuance of its 2001 financial statements, Cali issued long-term bonds in the amount of $4,500,000. Proceeds from the bonds were used to repay the note when it came due. How should Cali classify the note in its December 31, 2001, financial statements?

a. As a current liability, with separate disclosure of the note refinancing.
b. As a current liability, with no separate disclosure required.
c. As a noncurrent liability, with separate disclosure of the note refinancing.
d. As a noncurrent liability, with no separate disclosure required.
32. Mill Co.'s trial balance included the following account balances at December 31, 1999:

<table>
<thead>
<tr>
<th>Account</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>$15,000</td>
</tr>
<tr>
<td>Bonds payable, due 2000</td>
<td>$25,000</td>
</tr>
<tr>
<td>Discount on bonds payable, due 2000</td>
<td>$3,000</td>
</tr>
<tr>
<td>Dividends payable 1/31/00</td>
<td>$8,000</td>
</tr>
<tr>
<td>Notes payable, due 2001</td>
<td>$20,000</td>
</tr>
</tbody>
</table>

What amount should be included in the current liability section of Mill's December 31, 1999, balance sheet?

a. $45,000.
b. $51,000.
c. $65,000.
d. $78,000.

33. On March 1, 1995, a company established a sinking fund in connection with an issue of bonds due in 2007. At December 31, 1999, the independent trustee held cash in the sinking fund account representing the annual deposits to the fund and the interest earned on those deposits. How should the sinking fund be reported in the company's balance sheet at December 31, 1999?

a. The cash in the sinking fund should appear as a current asset.
b. Only the accumulated deposits should appear as a noncurrent asset.
c. The entire balance in the sinking fund account should appear as a current asset.
d. The entire balance in the sinking fund account should appear as a noncurrent asset.

34. On July 1, 2004, Fox Company purchased 400 of the $1,000 face amount, 8% bonds of Dey Corporation for $369,200 to yield 10% per annum. The bonds, which mature on July 1, 2009, pay interest semiannually on January 1 and July 1. Fox uses the interest method of amortization and the bonds are appropriately recorded as a long-term investment. The bonds should be reported on Fox's December 31, 2004, balance sheet at

a. $397,540
b. $374,120
c. $371,660
d. $366,740

35. Jent Corp. purchased bonds at a discount of $10,000. Subsequently, Jent sold these bonds at a premium of $14,000. During the period that Jent held this investment, amortization of the discount amounted to $2,000. What amount should Jent report as gain on the sale of the bonds?

a. $12,000.
b. $22,000.
c. $24,000.
d. $26,000.

36. An investor purchased a bond classified as a long-term investment between interest dates at a discount. At the purchase date, the carrying amount of the bond is more than the

- **Cash paid to seller**
- **Face amount of bond**

<table>
<thead>
<tr>
<th>a.</th>
<th>b.</th>
<th>c.</th>
<th>d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

37. An investor purchased a bond as a long-term investment on January 2. The investor's carrying value at the end of the first year would be highest if the bond was purchased at

a. Discount and amortized by the straight-line method.
b. Discount and amortized by the effective interest method.
c. Premium and amortized by the straight-line method.
d. Premium and amortized by the effective interest method.

38. Management can estimate the amount of loss that will occur if a foreign government expropriates some company assets. If expropriation is reasonably possible, a loss contingency should be

a. Disclosed but not accrued as a liability.
b. Disclosed and accrued as a liability.
c. Accrued as a liability but not disclosed.
d. Neither accrued as a liability nor disclosed.
39. Snelling Co. did not record an accrual for a contingent loss, but disclosed the nature of the contingency and the range of the possible loss. How likely is the loss?
   a. Remote.
   b. Reasonably possible.
   c. Probable.
   d. Certain.

40. During 1996, Tedd Co. became involved in a tax dispute with the IRS. At December 31, 1996, Tedd's tax advisor believed that an unfavorable outcome was probable. A reasonable estimate of additional taxes was $400,000, but could be as much as $600,000. After the 1996 financial statements were issued, Tedd received and accepted an IRS settlement offer of $450,000. What amount of accrued liability should Tedd have reported in its December 31, 1996, balance sheet?
   a. $400,000
   b. $450,000
   c. $500,000
   d. $600,000

41. On February 5, 2000, an employee filed a $2,000,000 lawsuit against Steel Co. for damages suffered when one of Steel’s plants exploded on December 29, 1999. Steel’s legal counsel expects the company will lose the lawsuit and estimates the loss to be between $500,000 and $1,000,000. The employee has offered to settle the lawsuit out of court for $900,000, but Steel will not agree to the settlement. In its December 31, 1999, balance sheet, what amount should Steel report as liability from lawsuit.
   a. $2,000,000
   b. $1,000,000
   c. $900,000
   d. $500,000

42. Brite Corp. had the following liabilities at December 31, 2000:

   Accounts payable $ 55,000
   Unsecured notes, 8%, due 7/1/01 400,000
   Accrued expenses 35,000
   Contingent liability 450,000
   Deferred income tax liability 25,000
   Senior bonds, 7%, due 3/31/01 1,000,000

   The contingent liability is an accrual for possible losses on a $1,000,000 lawsuit filed against Brite. Brite's legal counsel expects the suit to be settled in 2002, and has estimated that Brite will be liable for damages in the range of $450,000 to $750,000.

   The deferred income tax liability is not related to an asset for financial reporting and is expected to reverse in 2002.

43. Eagle Co. has cosigned the mortgage note on the home of its president, guaranteeing the indebtedness in the event that the president should default. Eagle considers the likelihood of default to be remote. How should the guarantee be treated in Eagle's financial statements?
   a. Disclosed only.
   b. Accrued only.
   c. Accrued and disclosed.
   d. Neither accrued nor disclosed.

44. During January 1999, Haze Corp. won a litigation award for $15,000 which was tripled to $45,000 to include punitive damages. The defendant, who is financially stable, has appealed only the $30,000 punitive damages. Haze was awarded $50,000 in an unrelated suit it filed, which is being appealed by the defendant. Counsel is unable to estimate the outcome of these appeals. In its 1999 financial statements, Haze should report what amount of pretax gain?
   a. $15,000
   b. $45,000
   c. $50,000
   d. $95,000

45. Kent Co., a division of National Realty, Inc., maintains escrow accounts and pays real estate taxes for National’s mortgage customers. Escrow funds are kept in interest-bearing accounts. Interest, less a 10% service fee, is credited to the mortgagee’s account and used to reduce future escrow payments. Additional information follows:

   Escrow accounts liability, 1/1/99 $ 700,000
   Escrow payments received during 1999 1,580,000
   Real estate taxes paid during 1999 1,720,000
   Interest on escrow funds during 1999 50,000

ESCROW ACCOUNTS LIABILITY

9Q-7
What amount should Kent report as escrow accounts liability in its December 31, 1999, balance sheet?

- $510,000.
- $515,000.
- $605,000.
- $610,000.

**CREDIT RISK**

46. Disclosure of information about significant concentrations of credit risk is required for

- All financial instruments.
- Financial instruments with off-balance-sheet credit risk only.
- Financial instruments with off-balance-sheet market risk only.
- Financial instruments with off-balance-sheet risk of accounting loss only.

**UNCONDITIONAL PURCHASE OBLIGATIONS**

47. Brad Corp. has unconditional purchase obligations associated with product financing arrangements. These obligations are reported as liabilities on Brad’s balance sheet, with the related assets also recognized. In the notes to Brad’s financial statements, the aggregate amount of payments for these obligations should be disclosed for each of how many years following the date of the latest balance sheet?

- 0
- 1
- 5
- 10

**MISCELLANEOUS TAX LIABILITIES**

48. Lime Co.’s payroll for the month ended January 31, 2002, is summarized as follows:

<table>
<thead>
<tr>
<th>Total wages</th>
<th>Federal income tax withheld</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000</td>
<td>1,200</td>
</tr>
</tbody>
</table>

All wages paid were subject to FICA. FICA tax rates were 7% each for employee and employer. Lime remits payroll taxes on the 15th of the following month. In its financial statements for the month ended January 31, 2002, what amounts should Lime report as total payroll tax liability and as payroll tax expense?

**Expense**

- $1,200
- $1,900
- $2,600

**Liability**

- $1,400
- $700
- $700

49. Under state law, Acme may pay 3% of eligible gross wages or it may reimburse the state directly for actual unemployment claims. Acme believes that actual unemployment claims will be 2% of eligible gross wages and has chosen to reimburse the state. Eligible gross wages are defined as the first $10,000 of gross wages paid to each employee. Acme had five employees each of whom earned $20,000 during 2000. In its December 31, 2000, balance sheet, what amount should Acme report as accrued liability for unemployment claims?

- $1,000.
- $1,500.
- $2,000.
- $3,000.

50. Which of the following statements is correct regarding the provision for income taxes in the financial statements of a sole proprietorship?

- The provision for income taxes should be based on business income using individual tax rates.
- The provision for income taxes should be based on business income using corporate tax rates.
- The provision for income taxes should be based on the proprietor's total taxable income, allocated to the proprietorship at the percentage that business income bears to the proprietor's total income.
- No provision for income taxes is required.

**WARRANTIES**

51. During 1997, Gum Co. introduced a new product carrying a two-year warranty against defects: The estimated warranty costs related to dollar sales are 2% within 12 months following the sale and 4% in the second 12 months following the sale. Sales and actual warranty expenditures for the years ended December 31, 1997 and 1998, are as follows:

<table>
<thead>
<tr>
<th>Sales</th>
<th>Actual warranty expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997 $150,000</td>
<td>$2,250</td>
</tr>
<tr>
<td>1998 $250,000</td>
<td>$7,500</td>
</tr>
<tr>
<td>$400,000</td>
<td>$9,750</td>
</tr>
</tbody>
</table>
What amount should Gum report as estimated warranty liability in its December 31, 1998, balance sheet?

a. $2,500  
b. $4,250  
c. $11,250  
d. $14,250  

52. Vadis Co. sells appliances that include a three-year warranty. Service calls under the warranty are performed by an independent mechanic under a contract with Vadis. Based on experience, warranty costs are estimated at $30 for each machine sold. When should Vadis recognize these warranty costs?

a. Evenly over the life of the warranty  
b. When the service calls are performed.  
c. When payments are made to the mechanic.  
d. When the machines are sold.

COUPONS

53. In packages of its products, the Kent Food Company includes coupons which may be presented to grocers for discounts on certain products of Kent on or before a stated expiration date. The grocers are reimbursed when they send the coupons to Kent. In Kent's experience, 40% of such coupons are redeemed, and one month generally elapses between the date a grocer receives a coupon from a consumer and the date Kent receives it. During 1994, Kent issued two series of coupons as follows:

<table>
<thead>
<tr>
<th>Issued on</th>
<th>Total value</th>
<th>Amount disbursed as of 12/31/94</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/94</td>
<td>$100,000</td>
<td>$34,000</td>
</tr>
<tr>
<td>7/1/94</td>
<td>120,000</td>
<td>40,000</td>
</tr>
</tbody>
</table>

Kent's December 31, 1994, balance sheet should include a liability for unredeemed coupons of

a. $0  
b. $8,000  
c. $14,000  
d. $48,000

54. In December 2001, Mill Co. began including one coupon in each package of candy that it sells and offering a toy in exchange for 50 cents and five coupons. The toys cost Mill 80 cents each. Eventually 60% of the coupons will be redeemed. During December, Mill sold 110,000 packages of candy and no coupons were redeemed. In its December 31, 2001, balance sheet, what amount should Mill report as estimated liability for coupons?

a. $3,960  
b. $10,560  
c. $19,800  
d. $52,800

GIFT CERTIFICATES

55. A retail store received cash and issued gift certificates that are redeemable in merchandise. The gift certificates lapse one year after they are issued. How would the deferred revenue account be affected by each of the following transactions?

<table>
<thead>
<tr>
<th>Redemption of certificates</th>
<th>Lapse of certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Decrease</td>
<td>No effect</td>
</tr>
<tr>
<td>b. Decrease</td>
<td>Decrease</td>
</tr>
<tr>
<td>c. No effect</td>
<td>No effect</td>
</tr>
<tr>
<td>d. No effect</td>
<td>Decrease</td>
</tr>
</tbody>
</table>

56. Regal Department Store sells gift certificates, redeemable for store merchandise, that expire one year after their issuance. Regal has the following information pertaining to its gift certificates sales and redemptions:

- Unredeemed at 12/31/97: $75,000
- 1998 sales: $250,000
- 1998 redemptions of prior year sales: $25,000
- 1998 redemptions of current year sales: $175,000

Regal's experience indicates that 10% of gift certificates sold will not be redeemed. In its December 31, 1998, balance sheet, what amount should Regal report as unearned revenue?

a. $125,000  
b. $112,500  
c. $100,000  
d. $50,000

REVIEW QUESTIONS

57. On April 1, 1999, Hill Corp. issued 200 of its $1,000 face value bonds at 101 plus accrued interest. The bonds were dated November 1, 1998, and bear interest at an annual rate of 9% payable semiannually on November 1 and May 1. What amount did Hill receive from the bond issuance?

a. $194,500  
b. $200,000  
c. $202,000  
d. $209,500
58. During 2000, Smith Co. filed suit against West, Inc. seeking damages for patent infringement. At December 31, 2000, Smith's legal counsel believed that it was probable that Smith would be successful against West for an estimated amount in the range of $75,000 to $150,000, with all amounts in the range considered equally likely. In March 2001, Smith was awarded $100,000 and received full payment thereof. In its 2000 financial statements, issued in February 2001, how should this award by reported?

a. As a receivable and revenue of $100,000.
b. As a receivable and deferred revenue of $100,000.
c. As a disclosure of a contingent gain of $100,000.
d. As a disclosure of a contingent gain of an undetermined amount in the range of $75,000 to $150,000.

59. A bond issued on June 1, 1998, has interest payment dates of April 1 and October 1. Bond interest expense for the year ended December 31, 1998, is for a period of

a. Seven months.
b. Six months.
c. Four months.
d. Three months.

60. At December 31, 1997, Cain, Inc., owed notes payable of $1,750,000, due on May 15, 1998. Cain expects to retire this debt with proceeds from the sale of 100,000 shares of its common stock. The stock was sold for $15 per share on March 10, 1998, prior to the issuance of the year-end financial statements. In Cain’s December 31, 1997, balance sheet, what amount of the notes payable should be excluded from current liabilities?

a. $0
b. $250,000
c. $1,500,000
d. $1,750,000

61. On January 2, 1999, Gill Co. issued $2,000,000 of 10-year, 8% bonds at par. The bonds, dated January 1, 1999, pay interest semi-annually on January 1 and July 1. Bond issue costs were $250,000. What amount of bond issue costs are unamortized at June 30, 2000?

a. $237,500.
b. $225,000.
c. $220,800.
d. $212,500.

62. Aneen's Video Mart sells 1- and 2-year mail order subscriptions for its video-of-the-month business. Subscriptions are collected in advance and credited to sales. An analysis of the recorded sales activity revealed the following:

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales</th>
<th>Less cancellations</th>
<th>Net sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>$420,000</td>
<td>20,000</td>
<td>$400,000</td>
</tr>
<tr>
<td>1997</td>
<td>$500,000</td>
<td>30,000</td>
<td>$470,000</td>
</tr>
</tbody>
</table>

In Aneen's December 31, 1997, balance sheet, the balance for unearned subscription revenue should be

a. $495,000
b. $470,000
c. $465,000
d. $340,000

63. During 2001, Haft Co. became involved in a tax dispute with the IRS. At December 31, 2001, Haft's tax advisor believed that an unfavorable outcome was probable. A reasonable estimate of additional taxes was $200,000 but could be as much as $300,000. After the 2001 financial statements were issued, Haft received and accepted an IRS settlement offer of $275,000. What amount of accrued liability should Haft have reported in its December 31, 2001 balance sheet?

a. $200,000
b. $250,000
c. $275,000
d. $300,000

64. Items 64 and 65 are based on the following:

On January 2, 1995, Chard Co. issued 10-year convertible bonds at 105. During 1998, these bonds were converted into common stock having an aggregate par value equal to the total face amount of the bonds. At conversion, the market price of Chard's common stock was 50 percent above its par value.
64. On January 2, 1993, cash proceeds from the issuance of the convertible bonds should be reported as
a. Contributed capital for the entire proceeds.
b. Contributed capital for the portion of the proceeds attributable to the conversion feature and as a liability for the balance.
c. A liability for the face amount of the bonds and contributed capital for the premium over the face amount.
d. A liability for the entire proceeds.

65. Depending on whether the book value method or the market value method was used, Chard would recognize gains or losses on conversion when using the

<table>
<thead>
<tr>
<th>Book value method</th>
<th>Market value method</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Either gain or loss</td>
<td>Gain</td>
</tr>
<tr>
<td>b. Either gain or loss</td>
<td>Loss</td>
</tr>
<tr>
<td>c. Neither gain nor loss</td>
<td>Loss</td>
</tr>
<tr>
<td>d. Neither gain nor loss</td>
<td>Gain</td>
</tr>
</tbody>
</table>

66. Lyle, Inc. is preparing its financial statements for the year ended December 31, 1999. Accounts payable amounted to $360,000 before any necessary year-end adjustment related to the following:

- At December 31, 1999, Lyle has a $50,000 debit balance in its accounts payable to Ross, a supplier, resulting from a $50,000 advance payment for goods to be manufactured to Lyle's specifications.
- Checks in the amount of $100,000 were written to vendors and recorded on December 29, 1999. The checks were mailed on January 5, 2000.

What amount should Lyle report as accounts payable in its December 31, 1999, balance sheet?

a. $510,000.
b. $410,000.
c. $310,000.
d. $210,000.

67. On July 1, 1999, York Co. purchased as a long-term investment $1,000,000 of Park, Inc.'s 8% bonds for $946,000, including accrued interest of $40,000. The bonds were purchased to yield 10% interest. The bonds mature on January 1, 2006, and pay interest annually on January 1. York uses the effective interest method of amortization. In its December 31, 1999, balance sheet, what amount should York report as investment in bonds?

a. $911,300
b. $916,600
c. $953,300
d. $960,600

68. On January 1, 1995, Purl Corp. purchased as a long-term investment $500,000 face value of Shaw, Inc.'s 8% bonds for $456,200. The bonds were purchased to yield 10% interest. The bonds mature on January 1, 2001, and pay interest annually on January 1. Purl uses the interest method of amortization. What amount (rounded to nearest $100) should Purl report on its December 31, 1996, balance sheet for this long-term investment?

a. $468,000
b. $466,200
c. $461,800
d. $456,200

69. Pam, Inc., has $1,000,000 of notes payable due June 15, 1996. At the financial statement date of December 31, 1995, Pam signed an agreement to borrow up to $1,000,000 to refinance the notes payable on a long-term basis. The financing agreement called for borrowings not to exceed 80% of the value of the collateral Pam was providing. At the date of issue of the December 31, 1995, financial statements, the value of the collateral was $1,200,000 and was not expected to fall below this amount during 1996. In its December 31, 1995, balance sheet, Pam should classify notes payable as

<table>
<thead>
<tr>
<th>Short-term obligations</th>
<th>Long-term obligations</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $0</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>b. $40,000</td>
<td>$960,000</td>
</tr>
<tr>
<td>c. $200,000</td>
<td>$800,000</td>
</tr>
<tr>
<td>d. $1,000,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

9Q-11
70. On March 31, 1999, Ashley, Inc.’s bondholders exchanged their convertible bonds for common stock. The carrying amount of these bonds on Ashley’s books was less than the market value but greater than the par value of the common stock issued. If Ashley used the book value method of accounting for the conversion, which of the following statements correctly states an effect of this conversion?

a. Stockholders' equity is increased.
b. Additional paid-in capital is decreased.
c. Retained earnings is increased.
d. An extraordinary loss is recognized.

71. Blue Co. issued preferred stock with detachable common stock warrants at a price which exceeded both the par value and the market value of the preferred stock. At the time the warrants are exercised, Blue's total stockholders' equity is increased by the

<table>
<thead>
<tr>
<th>Due date</th>
<th>Amounts due</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Principal</td>
</tr>
<tr>
<td>12/31/00</td>
<td>$40,000</td>
</tr>
<tr>
<td>12/31/01</td>
<td>40,000</td>
</tr>
<tr>
<td>12/31/02</td>
<td>40,000</td>
</tr>
<tr>
<td>12/31/03</td>
<td>40,000</td>
</tr>
<tr>
<td>12/31/04</td>
<td>40,000</td>
</tr>
</tbody>
</table>

72. On January 1, 1991, Fox Corp. issued 1,000 of its 10%, $1,000 bonds for $1,040,000. These bonds were to mature on January 1, 2001, but were callable at 101 any time after December 31, 1994. Interest was payable semiannually on July 1 and January 1. On July 1, 1996, Fox called all of the bonds and retired them. Bond premium was amortized on a straight-line basis. Before income taxes, Fox's gain or loss in 1996 on this early extinguishment of debt was

a. $30,000 gain.
b. $12,000 gain.
c. $10,000 loss.
d. $8,000 gain.

73. In May 1996, Caso Co. filed suit against Wayne, Inc. seeking $1,900,000 damages for patent infringement. A court verdict in November 1999 awarded Caso $1,500,000 in damages, but Wayne’s appeal is not expected to be decided before 2001. Caso’s counsel believes it is probable that Caso will be successful against Wayne for an estimated amount in the range between $800,000 and $1,100,000, with $1,000,000 considered the most likely amount. What amount should Caso record as income from the lawsuit in the year ended December 31, 1999?

a. $0
b. $800,000
c. $1,000,000
d. $1,500,000

74. On December 31, 1992, Arnold, Inc., issued $200,000, 8% serial bonds, to be repaid in the amount of $40,000 each year. Interest is payable annually on December 31. The bonds were issued to yield 10% a year. The bond proceeds were $190,280 based on the present values at December 31, 1999, of the five annual payments as follows:

<table>
<thead>
<tr>
<th>Due date</th>
<th>Amounts due</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Principal</td>
</tr>
<tr>
<td>12/31/00</td>
<td>$40,000</td>
</tr>
<tr>
<td>12/31/01</td>
<td>40,000</td>
</tr>
<tr>
<td>12/31/02</td>
<td>40,000</td>
</tr>
<tr>
<td>12/31/03</td>
<td>40,000</td>
</tr>
<tr>
<td>12/31/04</td>
<td>40,000</td>
</tr>
</tbody>
</table>

Arnold amortizes the bond discount by the interest method. In its December 31, 2000, balance sheet, at what amount should Arnold report the carrying value of the bonds?

a. $139,380
b. $149,100.
c. $150,280.
d. $153,308.

75. On February 24, 1993, Bart Company purchased 2,000 shares of Winn Corp.'s newly issued 6% cumulative $75 par preferred stock for $152,000. Each share carried one detachable stock warrant entitling the holder to acquire at $10, one share of Winn no-par common stock. On February 25, 1993, the market price of the preferred stock ex-warrants was $72 a share and the market price of the stock warrants was $8 a warrant. On December 29, 1993, Bart sold all the stock warrants for $20,500. The gain on the sale of the stock warrants was

a. $0
b. $500
c. $4,500
d. $5,300
76. On January 2, 1994, Nast Co. issued 8% bonds with a face amount of $1,000,000 that mature on January 2, 2000. The bonds were issued to yield 12%, resulting in a discount of $150,000. Nast incorrectly used the straight-line method instead of the effective interest method to amortize the discount. How is the carrying amount of the bonds affected by the error?

At December 31, 2001 At January 2, 2007
a. Overstated Understated
b. Overstated No effect
c. Understated Overstated
d. Understated No effect

77. On January 1, 2001, Oak Co. issued 400 of its 8%, $1,000 bonds at 97 plus accrued interest. The bonds are dated October 1, 2000, and mature on October 1, 2010. Interest is payable semiannually on April 1 and October 1. Accrued interest for the period October 1, 2000, to January 1, 2001, amounted to $8,000. On January 1, 2001, what amount should Oak report as bonds payable, net of discount?

a. $380,300.

b. $388,000.

c. $388,300.

d. $392,000.

78. Dunn Trading Stamp Co. records stamp service revenue and provides for the cost of redemptions in the year stamps are sold to licensees. Dunn's past experience indicates that only 80% of the stamps sold to licensees will be redeemed. Dunn's liability for stamp redemptions was $6,000,000 at December 31, 1995. Additional information for 1996 is as follows:

Stamp service revenue from stamps sold to licensees $4,000,000
Cost of redemptions (stamps sold prior to 1/1/96) 2,750,000

If all the stamps sold in 1996 were presented for redemption in 1997, the redemption cost would be $2,250,000. What amount should Dunn report as a liability for stamp redemptions at December 31, 1996?

a. $7,250,000
b. $5,500,000
c. $5,050,000
d. $3,250,000

79. On January 31, 1999, Beau Corp. issued $300,000 maturity value, 12% bonds for $300,000 cash. The bonds are dated December 31, 1998, and mature on December 31, 2008. Interest will be paid semiannually on June 30 and December 31. What amount of accrued interest payable should Beau report in its September 30, 1999, balance sheet?

a. $27,000.
b. $24,000.
c. $18,000.
d. $9,000.

80. On July 1, 1999, Cove Corp., a closely-held corporation, issued 6% bonds with a maturity value of $60,000, together with 1,000 shares of its $5 par value common stock, for a combined cash amount of $110,000. The market value of Cove's stock cannot be ascertained. If the bonds were issued separately, they would have sold for $40,000 on an 8% yield to maturity basis. What amount should Cove report for additional paid-in capital on the issuance of the stock?

a. $75,000
b. $65,000
c. $55,000
d. $45,000

81. Hudson Hotel collects 15% in city sales taxes on room rentals, in addition to a $2 per room, per night, occupancy tax. Sales taxes for each month are due at the end of the following month, and occupancy taxes are due 15 days after the end of each calendar quarter. On January 3, 2001, Hudson paid its November 2000 sales taxes and its fourth quarter 2000 occupancy taxes. Additional information pertaining to Hudson's operations is:

<table>
<thead>
<tr>
<th>Room rentals</th>
<th>Room nights</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>$100,000</td>
</tr>
<tr>
<td>November</td>
<td>110,000</td>
</tr>
<tr>
<td>December</td>
<td>150,000</td>
</tr>
</tbody>
</table>

What amounts should Hudson report as sales taxes payable and occupancy taxes payable in its December 31, 2000, balance sheet?

<table>
<thead>
<tr>
<th>Sales taxes</th>
<th>Occupancy taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>$39,000</td>
<td>$6,000</td>
</tr>
<tr>
<td>$39,000</td>
<td>$8,200</td>
</tr>
<tr>
<td>$54,000</td>
<td>$6,000</td>
</tr>
<tr>
<td>$54,000</td>
<td>$8,200</td>
</tr>
</tbody>
</table>

9Q-13
82. Grim Corporation operates a plant in a foreign country. It is probable that the plant will be expropriated. However, the foreign government has indicated that Grim will receive a definite amount of compensation for the plant. The amount of compensation is less than the fair market value, but exceeds the carrying amount of the plant. The contingency should be reported
a. As a valuation allowance as a part of stockholders' equity.
b. As a fixed asset valuation allowance account.
c. In the notes to the financial statements.
d. In the income statement.

83. Ivy Co. operates a retail store. All items are sold subject to a 6% state sales tax, which Ivy collects and records as sales revenue. Ivy files quarterly sales tax returns when due, by the 20th day following the end of the sales quarter. However, in accordance with state requirements, Ivy remits sales tax collected by the 20th day of the month following any month such collections exceed $500. Ivy takes these payments as credits on the quarterly sales tax return. The sales taxes paid by Ivy are charged against sales revenue.

Following is a monthly summary appearing in Ivy's first quarter 2002 sales revenue account:

<table>
<thead>
<tr>
<th></th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>$ ---</td>
<td>$10,600</td>
</tr>
<tr>
<td>February</td>
<td>600</td>
<td>7,420</td>
</tr>
<tr>
<td>March</td>
<td>---</td>
<td>8,480</td>
</tr>
<tr>
<td></td>
<td>$600</td>
<td>$26,500</td>
</tr>
</tbody>
</table>

In its March 31, 2002, balance sheet, what amount should Ivy report as sales taxes payable
a. $600
b. $900
c. $1,500
d. $1,590

84. Adams, Inc., owns 50 shares of the outstanding common stock of Bland Corporation, which has several hundred thousand shares publicly traded. These 50 shares were purchased by Adams in 1990 for $100 per share. On August 30, 1992, Bland distributed 50 stock rights to Adams. Adams was entitled to buy one new share of Bland common stock for $90 cash and two of these rights. On August 30, 1992, each share of stock had a market value of $132 ex-rights, and each right had a market value of $18. What cost should be recorded for each new share that Adams acquires by exercising the rights?
a. $90.
b. $114.
c. $126.
d. $132.

Items 85 and 86 are based on the following:
House Publishers offered a contest in which the winner would receive $1,000,000, payable over 20 years. On December 31, 2000, House announced the winner of the contest and signed a note payable to the winner for $1,000,000, payable in $50,000 installments every January 2. Also on December 31, 2000, House purchased an annuity for $418,250 to provide the $950,000 prize monies remaining after the first $50,000 installment, which was paid on January 2, 2001.

85. In its December 31, 2000, balance sheet, what amount should House report as note payable-contest winner, net of current portion?
a. $368,250
b. $418,250
c. $900,000
d. $950,000

86. In its 2000 income statement, what should House report as contest prize expense?
a. $0
b. $418,250
c. $468,250
d. $1,000,000

87. On July 1, 1996, Pell Co. purchased Green Corp. ten-year, 8% bonds with a face amount of $500,000 for $420,000. The bonds mature on June 30, 2004, and pay interest semiannually on June 30 and December 31. Using the interest method, Pell recorded bond discount amortization of $1,800 for the six months ended December 31, 1996. From this long-term investment, Pell should report 1996 revenue of
a. $16,800
b. $18,200
c. $20,000
d. $21,800
88. Ames, Inc., has $500,000 of notes payable due June 15, 1998. Ames signed an agreement on December 1, 1997, to borrow up to $500,000 to refinance the notes payable on a long-term basis with no payments due until 1999. The financing agreement stipulated that borrowings may not exceed 80% of the value of the collateral Ames was providing. At the date of issuance of the December 31, 1997, financial statements, the value of the collateral was $600,000 and is not expected to fall below this amount during 1998. In Ames' December 31, 1997, balance sheet, the obligation for these notes payable should be classified as

<table>
<thead>
<tr>
<th>Short-term</th>
<th>Long-term</th>
</tr>
</thead>
<tbody>
<tr>
<td>$500,000</td>
<td>$0</td>
</tr>
<tr>
<td>$100,000</td>
<td>$400,000</td>
</tr>
<tr>
<td>$20,000</td>
<td>$480,000</td>
</tr>
<tr>
<td>$0</td>
<td>$500,000</td>
</tr>
</tbody>
</table>

91. On December 1, 1995, Money Co. gave Home Co. a $200,000, 11% loan. Money paid proceeds of $194,000 after the deduction of a $6,000 non-refundable loan origination fee. Principal and interest are due in 60 monthly installments of $4,310, beginning January 1, 1996. The repayments yield an effective interest rate of 11% at a present value of $200,000 and 12.4% at a present value of $194,000. What amount of income from this loan should Money report in its 1995 income statement?

a. $0
b. $1,833
c. $2,005
d. $7,833

92. For a bond issue which sells for less than its par value, the market rate of interest is

a. Dependent on rate stated on the bond.
b. Equal to rate stated on the bond.
c. Less than rate stated on the bond.
d. Higher than rate stated on the bond.

93. The loss from a decrease in the fair value of a derivative that is designated as a hedge would be included in current earnings if the derivative is a hedge of

a. Cash flows.
b. A forecasted foreign currency transaction.
c. A net investment in a foreign operation.
d. A foreign currency exposure of an available-for-sale security.

94. In ASC 815, Accounting for Derivatives and Hedging Activities, the FASB used the term "underlying." Which of the following items is an example of an "underlying?"

a. A specified interest rate.
b. Number of currency units.
c. Number of pounds.
d. An embedded derivative.

95. A gain on a forecasted cash flow hedge should be reported as

a. An extraordinary item.
b. Change in accounting estimate.
c. Other comprehensive income.
d. Income from continuing operations.
96. On October 15, 1999, Gilmore Inc. invested in a derivative designated as a hedge of the fair value of an asset. By December 31, 1999, the fair value of the hedged asset had decreased by $200,000 but the fair value of the derivative had increased by $220,000. The net effect on 1999 earnings would be
   a. $200,000
   b. $0
   c. $20,000
   d. $220,000

97. Helgeson Corporation had the following transaction in the last quarter of 1999. Which of the transactions is most likely to result in a derivative subject to ASC 815 – Accounting for Derivative Instruments and Hedging Activities?
   a. Invested in land with the anticipation of an increase in fair value.
   b. Purchased available-for-sale securities.
   c. Negotiated a two-year loan with a Swiss bank to take advantage of lower European interest rates.
   d. Based on a forecasted purchase of cocoa beans, Helgeson bought a futures contract to protect itself from changes in market prices of cocoa beans.

98. On November 1, 1999, Cox Corp. enters into a derivative contract to hedge the forecasted cash flows associated with a future sale of 100,000 bushels (notional amount) of corn. The future sale date is January 11, 2000. The fair value of the derivative contract at December 31, 1999 increased by $15,000 which was the same amount as the decrease in the value of corn. The fair value of the derivative contract increased by an additional $8,000 from January 1 to January 15, which again corresponded to the decrease in the value of the corn. On January 15, 2000, the corn was sold and the derivative was settled. The gains from the derivative should be recognized in 1999 and 2000 as

   \[
   \begin{array}{c|c|c}
   & 1999 & 2000 \\
   \hline
   Other Comprehensive Income & $15,000 & $15,000 \\
   Earnings (Income) & $23,000 & $23,000 \\
   \end{array}
   \]

   a. $200,000
   b. $220,000
   c. $20,000
   d. $220,000

99. ASC 815 defines a derivative as a financial instrument that has the following elements.
   a. One or more underlying and one or more notional amounts or payment provisions or both; requires either no initial investment or an immaterial net investment and requires or permits net settlement.
   b. One underlying; one notional amount and a net settlement provision.
   c. An embedded contract; a conversion clause; and a net settlement amount.
   d. An underlying; a notional amount; and an effective hedge.

100. Ace Co. settled litigation on February 1, 2002, for an event that occurred during 2001. An estimated liability was determined as of December 31, 2001. This estimate was significantly less than the final settlement. The transaction is considered to be material. The financial statements for year-end 2001 have not been issued. How should the settlement be reported in Ace’s year-end 2001 financial statements?
   a. Disclosure only of the settlement.
   b. Only an accrual of the settlement.
   c. Neither a disclosure nor an accrual.
   d. Both a disclosure and an accrual.

101. Wilk Co. reported the following liabilities at December 31, 2001:

   Accounts payable-trade $750,000
   Short-term borrowings 400,000
   Bank loan, current portion $100,000 3,500,000
   Bank loan, matures June 30, 2002 1,000,000

   The bank loan of $3,500,000 was in violation of the loan agreement. The creditor had not waived the rights for the loan. What amount should Wilk report as current liabilities at December 31, 2001?
   a. $1,250,000
   b. $2,150,000
   c. $2,250,000
   d. $5,650,000

Author's Note:
See Chapter 6 for questions on Derivatives and Foreign Currency.
102. Perk, Inc. issued $500,000, 10% bonds to yield 8%. Bond issuance costs were $10,000. How should Perk calculate the net proceeds to be received from the issuance?
   a. Discount the bonds at the stated rate of interest.
   b. Discount the bonds at the market rate of interest.
   c. Discount the bonds at the stated rate of interest and deduct bond issuance costs.
   d. Discount the bonds at the market rate of interest and deduct bond issuance costs.

103. Whether recognized or unrecognized in an entity’s financial statements, disclosure of the fair values of the entity’s financial instruments is required when
   a. It is practicable to estimate those values
   b. The entity maintains accurate cost records.
   c. Aggregated fair values are material to the entity.
   d. Individual fair values are material to the entity.

104. For the week ended June 30, 1995, Free Co. paid gross wages of $20,000, from which federal income taxes of $2,500 and FICA were withheld. All wages paid were subject to FICA tax rates of 7% each for employer and employee. Free makes all payroll-related disbursements from a special payroll checking account to cover net payroll and related payroll taxes for the week ended June 30, 1995. What is the amount needed to cover the net payroll and related payroll taxes?
   a. $21,400
   b. $22,800
   c. $23,900
   d. $25,300

105. Cado Co.’s payroll for the month ended January 31 is summarized as follows:

   Total wages $100,000

   Amount of wages subject to payroll taxes:
   FICA 80,000
   Unemployment 20,000

   Payroll tax rates:
   FICA for employer and employee 7% each
   Unemployment 3%

   In its January 31 balance sheet, what amount should Cado accrue as its share of payroll taxes?
   a. $6,200
   b. $10,000
   c. $11,800
   d. $17,000

106. On September 30, World Co. borrowed $1,000,000 on a 9% note payable. World paid the first of four quarterly payments of $264,200 when due on December 30. In its income statement for the year, what amount should World report as interest expense?
   a. $0
   b. $14,200
   c. $22,500
   d. $30,000

107. On January 1 of the current year, Lean Co. made an investment of $10,000. The following is the present value of $1.00 discounted at a 10% interest rate:

   Present value of $1.00
   Periods Discontinued at 10%
   1 .909
   2 .826
   3 .751

   What amount of cash will Lean accumulate in two years?
   a. $12,000
   b. $12,100
   c. $16,250
   d. $27,002

108. Which of the following financial instruments is not considered a derivative financial instrument?
   a. Interest-rate swaps
   b. Currency futures
   c. Stock index options
   d. Bank certificates of deposit.

109. When debt is issued at a discount, interest expense over the term of debt equals the cash interest paid
   a. Minus discount.
   b. Minus discount minus par value.
   c. Plus discount.
   d. Plus discount plus par value.

110. What type of bonds in a particular bond issuance will not all mature on the same date?
   a. Debenture bonds.
   b. Serial bonds.
   c. Term bonds.
   d. Sinking fund bonds.
111. Which of the following is the characteristic of a perfect hedge?
   a. No possibility of future gain or loss.
   b. No possibility of future gain only.
   c. No possibility of future loss only.
   d. The possibility of future gain and no future loss.

112. Which of the following statements characterizes convertible debt?
   a. The holder of the debt must be repaid with shares of the issuer's stock.
   b. No value is assigned to the conversion feature when convertible debt is issued.
   c. The transaction should be recorded as the issuance of stock.
   d. The issuer's stock price is less than market value when the debt is converted.

113. During Year 4, a former employee of Dane Co. began a suit against Dane for wrongful termination in November Year 3. After considering all of the facts, Dane's legal counsel believes that the former employee will prevail and will probably receive damages of between $1,000,000 and $1,500,000, with $1,300,000 being the most likely amount. Dane's financial statements for the year ended December 31, Year 3, will not be issued until February Year 4. In its December 31, Year 3, balance sheet, what amount should Dane report as a liability with respect to the suit?
   a. $0
   b. $1,000,000
   c. $1,300,000
   d. $1,500,000

114. On January 1, Stunt Corp. had outstanding convertible bonds with a face value of $1,000,000 and an unamortized discount of $100,000. On that date, the bonds were converted into 100,000 shares of $1 par stock. The market value on the date of conversion was $12 per share. The transaction will be accounted for with the book value method. By what amount will Stunt's stockholders' equity increase as a result of the bond conversion?
   a. $100,000
   b. $900,000
   c. $1,000,000
   d. $1,200,000

115. A company has outstanding accounts payable of $30,000 and a short-term construction loan in the amount of $100,000 at year end. The loan was refinanced through issuance of long-term bonds after year end but before issuance of financial statements. How should these liabilities be recorded in the balance sheet?
   a. Long-term liabilities of $130,000.
   b. Current liabilities of $130,000.
   c. Current liabilities of $30,000, long-term liabilities of $100,000.
   d. Current liabilities of $130,000, with required footnote disclosure of the refinancing of the loan.

116. A company has the following liabilities at year end:
   - Mortgage note payable; $16,000 due within 12 months: $355,000
   - Short-term debt that the company is refinancing with long-term debt: $175,000
   - Deferred tax liability arising from depreciation: $25,000

   What amount should the company include in the current liability section of the balance sheet?
   a. $0
   b. $16,000
   c. $41,000
   d. $191,000

117. Wall Co. sells a product under a two-year warranty. The estimated cost of warranty repairs is 2% of net sales. During Wall's first two years in business, it made the following sales and incurred the following warranty repair costs:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Sales</th>
<th>Total Repair Costs Incurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$250,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>2</td>
<td>$300,000</td>
<td>$300,000</td>
</tr>
</tbody>
</table>

   What amount should Wall report as warranty expense for year 2?
   a. $1,000
   b. $5,000
   c. $5,900
   d. $6,000
118. A company issued a bond with a stated rate of interest that is less than the effective interest rate on the date of issuance. The bond was issued on one of the interest payment dates. What should the company report on the first interest payment date?
a. An interest expense that is less than the cash payment made to bondholders.
b. An interest expense that is greater than the cash payment made to bondholders.
c. A debit to the unamortized bond discount.
d. A debit to the unamortized bond premium.

119. A company issues bonds at 98, with a maturity value of $50,000. The entry the company uses to record the original issue should include which of the following?
a. A debit to bond discount of $1,000.
b. A credit to bonds payable of $49,000.
c. A credit to bond premium of $1,000.
d. A debit to bonds payable of $50,000.

120. Which of the following is reported as interest expense?
a. Pension cost interest.
b. Amortization of discount of a note.
c. Deferred compensation plan interest.
d. Interest incurred to finance a software development for internal use.

121. Willem Co. reported the following liabilities at December 31, Year 1

<table>
<thead>
<tr>
<th>Liability</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable-trade</td>
<td>$750,000</td>
</tr>
<tr>
<td>Short-term borrowings</td>
<td>$400,000</td>
</tr>
<tr>
<td>Mortgage payable, current portion</td>
<td>$100,000</td>
</tr>
<tr>
<td>Other bank loan, matures</td>
<td>$3,500,000</td>
</tr>
<tr>
<td></td>
<td>$1,000,000</td>
</tr>
</tbody>
</table>

The $1,000,000 bank loan was refinanced with a 20-year loan on January 15, Year 2 with the first principal payment due January 15, Year 3. Willem's audited financial statements were issued February 28, Year 2. What amount should Willem report as current liabilities at December 31, Year 1?
a. $850,000
b. $1,150,000
c. $1,250,000
d. $2,250,000

122. Jones International prepares its financial statements under IFRS. If the company issued convertible debt for $600,000 and the fair value of the bonds is $530,000, how should the transaction be recorded?
a. A bond liability of $600,000
b. A bond liability of $570,000 and an equity account for $30,000
c. A bond liability of $600,000 and a contra liability account for $30,000
d. A bond liability for $570,000 and comprehensive income of $30,000

123. IFRS defines a "provision" (contingency) that is as probable as
a. Above 75%
b. Between 60-85%
c. More like than not
d. Substance over form

124. Under IFRS, if a "provision" (contingency) that is probable is accrued using a range of possible losses how is the amount of the accrual determined?
a. Low end of the range
b. Upper end of the range
c. 75% of the upper end of the range
d. Mid-point of the range
Chapter Nine
Bonds, Accounting for Debt Problems

NUMBER 1

Question Number 1 consists of 5 items. Select the best answer for each item. Answer all items.

Items 1 through 5 are based on the following:
Hamnoff, Inc.'s $50 par value common stock has always traded above par. During 1999, Hamnoff had several transactions that affected the following balance sheet accounts:

I. Bond discount
II. Bond premium
III. Bonds payable
IV. Common stock
V. Additional paid-in capital
VI. Retained earnings

Required:
For items 1 through 5, determine whether the transaction increased, decreased, or had no effect on each of the balances in the above accounts.

1. Hamnoff issued bonds payable with a nominal rate of interest that was less than the market rate of interest.
2. Hamnoff issued convertible bonds, which are common stock equivalents, for an amount in excess of the bonds' face amount.
3. Hamnoff issued common stock when the convertible bonds described in item 2 were submitted for conversion. Each $1,000 bond was converted into 20 common shares. The book value method was used for the early conversion.
4. Hamnoff issued bonds, with detachable stock warrants, for an amount equal to the face amount of the bonds. The stock warrants have a determinable value.
5. Hamnoff declared and issued a 2% stock dividend.

Your answer sheet should be organized as follows:

<table>
<thead>
<tr>
<th>Bond/Discount</th>
<th>Bond/Premium</th>
<th>Bonds/Payable</th>
<th>Common Stock</th>
<th>Additional Paid-in Capital</th>
<th>Retained Earnings</th>
</tr>
</thead>
</table>

NUMBER 2

Lino Corporation's liability account balances at December 31, 1993, included the following:

- Note payable to bank $800,000
- Liability under capital lease 280,000
- Deferred income taxes 100,000

Additional information:
- The note payable, dated October 1, 1993, bears interest at an annual rate of 10% payable semiannually on April 1 and October 1. Principal payments are due annually on October 1 in four equal installments.
- The capital lease is for a 10-year period beginning December 31, 1988. Equal annual payments of $100,000 are due on December 31 of each year. The 16% interest rate implicit in the lease is known by Lino. At December 31, 1993, the present value of the four remaining lease payments discounted at 16% was $280,000.
- Deferred income taxes are provided in recognition of timing differences between financial statement and income tax reporting of depreciation. For the year ended December 31, 1994, depreciation per tax return exceeded book depreciation by $50,000. Lino's income tax rate for 1994 was 30%.
- On July 1, 1994, Lino issued $1,000,000 face amount of 10-year, 10% bonds for $750,000, to yield 15%. Interest is payable annually on July 1. Bond discount is amortized by the interest method.
- All required principal and interest payments were made on schedule in 1994.

Required:
- b. Prepare a schedule showing interest expense that should appear in Lino's income statement for the year ended December 31, 1994.

NUMBER 3

Part a.

On January 1, 1992, MyKoo Corporation issued $1,000,000 in five-year, 5% serial bonds to be repaid in the amount of $200,000 on January 1, of 1993, 1994, 1995, 1996, and 1997. Interest is payable at the end of each year. The bonds were sold to yield a rate of 6%. Information on present value and future amount factors is as follows:

<table>
<thead>
<tr>
<th>Number of years</th>
<th>Present Value of $1</th>
<th>Future amount of $1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>1</td>
<td>.9524</td>
<td>.9434</td>
</tr>
<tr>
<td>2</td>
<td>.9070</td>
<td>.8900</td>
</tr>
<tr>
<td>3</td>
<td>.8638</td>
<td>.8396</td>
</tr>
<tr>
<td>4</td>
<td>.8227</td>
<td>.7921</td>
</tr>
<tr>
<td>5</td>
<td>.7835</td>
<td>.7473</td>
</tr>
</tbody>
</table>

Present value of an ordinary annuity of $1 for 5 years 4.3295 4.2124
Future amount of an ordinary annuity of $1 for 5 years 5.5256 5.6371
Required:
1. Prepare a schedule showing the computation of the total amount received from the issuance of the serial bonds. Show supporting computations in good form.
2. Assume the bonds were originally sold at a discount of $26,247. Prepare a schedule of amortization of the bond discount for the first two years after issuance, using the interest (effective rate) method. Show supporting computations in good form.

Part b.
On January 1, 1998, when its $30 par value common stock was selling for $80 per share, a corporation issued $10,000,000 of 4% convertible debentures due in ten years. The conversion option allowed the holder of each $1,000 bond to convert the bond into five shares of the corporation's $30 par value common stock. The debentures were issued for $11,000,000. The present value of the bond payments at the time of issuance was $8,500,000 and the corporation believes the difference between the present value and the amount paid is attributable to the conversion feature.

On January 1, 1999, the corporation's $30 par value common stock was split 3 for 1. On January 1, 2000, when the corporation's $10 par value common stock was selling for $90 per share, holders of 40% of the convertible debentures exercised their conversion options. The corporation uses the straight-line method for amortizing any bond discounts or premiums.

Required:
1. Prepare in general journal format the entry to record the original issuance of the convertible debentures.
2. Prepare in general journal format the entry to record the exercise of the conversion option, using the book value method. Show supporting computations in good form.

Part c.
On July 1, 1998, Salem Corporation issued $2,000,000 of 7% bonds payable in ten years. The bonds pay interest semiannually. The bonds include detachable warrants giving the bondholder the right to purchase for $30, one share of $1 par value common stock at any time during the next ten years. The bonds were sold for $2,000,000. The value of the warrants at the time of issuance was $100,000.

Required:
Prepare in general journal format the entry to record the issuance of the bonds.

NUMBER 4

On June 30, 1995, Corval Co. issued 15-year 12% bonds at a premium (effective yield 10%). On November 30, 1998, Corval transferred both cash and property to the bondholders to extinguish the entire debt. The fair value of the transferred property equaled its carrying amount. The fair value of the cash and property transferred exceeded the bonds carrying amount. [Ignore income taxes.]

Required:
a. Explain the purpose of the effective interest method and the effect of applying the method in 1995 on Corval’s bond premium.
b. What would have been the effect on 1995 interest expense, net income, and the carrying amount of the bonds if Corval had incorrectly adopted the straight-line method instead of the effective interest method?
c. How should Corval calculate and report the effects of the November 30, 1998, transaction in its 1998 income statement? Why is this presentation appropriate?
d. How should Corval report the effects of the November 30, 1998, transaction in its statement of cash flows using the indirect method?
NUMBER 5

Part a.
On January 1, 1999, the Hopewell Company sold its 8% bonds that had a face value of $1,000,000. Interest is payable at December 31, each year. The bonds mature on January 1, 2007. The bonds were sold to yield a rate of 10%. The present value of an ordinary annuity of $1 for 10 periods at 10% is 6.1446. The present value of $1 for 10 periods at 10% is 0.3855.

Required:
Prepare a schedule to compute the total amount received from the sale of the bonds. Show supporting computations in good form.

Part b.
On September 1, 1999, the Junction Company sold at 104, (plus accrued interest) four thousand of its 9%, ten-year, $1,000 face value, nonconvertible bonds with detachable stock warrants. Each bond carried two detachable warrants; each warrant was for one share of common stock, at a specified option price of $15 per share. Shortly after issuance, the warrants were quoted on the market for $3 each. No market value can be determined for the bonds above. Interest is payable on December 1, and June 1. Bond issue costs of $40,000 were incurred.

Required:
Prepare in general journal format the entry to record the issuance of the bonds. Show supporting computations in good form.

Part c.
On December 1, 1996, The Cone Company issued its 7%, $2,000,000 face value bonds for $2,200,000, plus accrued interest. Interest is payable on November 1 and May 1. On December 31, 1998, the book value of the bonds, inclusive of the unamortized premium, was $2,100,000. On July 1, 1999, Cone reacquired the bonds at 98, plus accrued interest. Cone appropriately uses the straight-line method for the amortization of bond premium because the results do not materially differ from using the interest method.

Required:
Prepare a schedule to compute the gain or loss on this early extinguishment of debt. Show supporting computations in good form.

NUMBER 6

On June 1, 1998, Warner, Inc., purchased as a long-term investment 800 of the $1,000 face value, 8% bonds of Universal Corporation for $738,300. The bonds were purchased to yield 10% interest. Interest is payable semiannually on December 1 and June 1. The bonds mature on June 1, 2003. Warner uses the effective interest method of amortization. On November 1, 1999, Warner sold the bonds for $785,000. This amount includes the appropriate accrued interest.

Required:
Prepare a schedule showing the income or loss before income taxes from the bond investment that Warner should record for the years ended December 31, 1998, and 1999. Show supporting computations in good form.
NUMBER 7
On January 2, 1994, Drew Company issued 9% term bonds dated January 2, 1994, at an effective annual interest rate (yield) of 10%. Drew uses the effective interest method of amortization. On July 1, 1996, the bonds were extinguished early when Drew acquired them in the open market for a price greater than their face amount.

On September 1, 1996, Drew issued for cash 7% nonconvertible bonds dated September 1, 1996, with detachable stock purchase warrants. Immediately after issuance, both the bonds and the warrants had separately determined market values.

Required:
 a. 1. Were the 9% term bonds issued at face amount, at a discount, or at a premium? Why?
   2. Would the amount of interest expense for the 9% term bonds using the effective interest method of amortization be higher in the first or second year of the life of the bond issue? Why?
 b. 1. How should gain or loss on early extinguishment of debt be determined? Does the early extinguishment of the 9% term bonds result in a gain or loss? Why?
   2. How should Drew report the early extinguishment of the 9% term bonds on the 1996 income statement?
 c. How should Drew account for the issuance of the 7% nonconvertible bonds with detachable stock purchase warrants?

NUMBER 8
The following information relates to the obligations of Villa Watch Co. as of December 31, 1997:

• Accounts payable for goods and services purchased on open account amount to $35,000 at December 31, 1997.


• On December 30, 1997, Villa entered a 6-year capital lease on a warehouse and made the first annual lease payment of $100,000. Villa's incremental borrowing rate was 12%, and the interest rate implicit in the lease, which was known to Villa, was 10%. The rounded present value factors for an annuity due for 6 years are 4.6 at 12% and 4.8 at 10%.

• On July 1, 1997, Villa issued $500,000, 8% bonds for $440,000 to yield 10%. The bonds mature on June 30, 2003 and pay interest annually every June 30. At December 31, 1997, the bonds were trading on the open market at 86 to yield 12%. Villa uses the effective-interest method.

• Villa's 1997 pretax financial income was $850,000 and its taxable income was $600,000. The difference is due to $100,000 of permanent differences and $150,000 of temporary differences related to noncurrent assets. At December 31, 1997, Villa had cumulative taxable differences of $300,000 related to noncurrent assets. Villa's effective tax rate is 30%. Villa made no estimated tax payments during the year.
Contingency information:

-- Villa has been named a liable party for toxic waste cleanup on its land and must pay an as-yet undetermined amount for environmental remediation activities.

-- An adjoining landowner, Clear Toothpaste Co., sold its property because of possible toxic contamination of the water supply and resulting potential adverse public reaction toward its product. Clear sued Villa for damages. There is a reasonable possibility that Clear will prevail and be awarded between $250,000 and $600,000.

-- As a result of comprehensive risk assessment, Villa has discontinued rockslide insurance for its warehouse, which is located at the base of a mountain. The warehouse has never sustained rockslide damage, and the probability of sustaining future damage is only slight.

Required:


b. Discuss the information Villa is required to disclose, either in the body of the financial statements or the notes thereto, related to bonds payable and capital leases included in the liabilities presented above.

c. Explain how Villa should account for each contingency in its 1997 financial statements. Discuss the theoretical justification for each accounting treatment.

NUMBER 9

Cope Company is a manufacturer of household appliances. During the year, the following information became available:

- Probable warranty costs on its household appliances are estimated to be 1% of sales.
- One of its manufacturing plants is located in a foreign country. There is a threat of expropriation of this plant. The threat of expropriation is deemed to be reasonably possible. Any compensation from the foreign government would be less than the carrying amount of the plant.
- It is probable that damages will be received by Cope next year as a result of a lawsuit filed this year against another household appliances manufacturer.

Required:

In answering the following, do not discuss deferred income tax implications.

a. How should Cope report the probable warranty costs? Why?

b. How should Cope report the threat of expropriation of assets? Why?

c. How should Cope report this year the probable damages that may be received next year? Why?
NUMBER 10

Coyn, CPA, has been approached by Howe, the chief financial officer of Chatham Co. Howe is aware that the Financial Accounting Standards Board is engaged in an ongoing project to improve disclosure of information about financial instruments and has recently issued two related Statements of Financial Accounting Standards: ASC 825, Disclosures about Fair Value of Financial Instruments; and Financial Instruments with Concentration of Credit Risk; ASC 815 Derivative Financial Instruments. In accordance with these pronouncements, Howe has prepared the following footnote for Chatham’s financial statements:

Note 12: Financial Instruments
The Company uses various financial instruments, including derivative financial instruments, to manage its interest rate and foreign currency exchange rate risks. Other financial instruments that potentially subject the Company to concentrations of credit risk consist principally of trade receivables.

Howe will be meeting with Chatham’s board of directors to review the financial statements, and has asked Coyn to prepare a handout for the board explaining the terms used in the footnote.

Required: Prepare the requested handout. Including the following:

a. What is a financial instrument? Define and give an example of derivative financial instruments.

b. Define both market risk and credit risk. What is meant by the term concentration of credit risk?

c. Define fair value. Discuss the methods Chatham’s management might use to estimate the fair values of its various financial instruments.

NUMBER 11

Number 11 consists of 11 items. Select the best answer for each item.

On July 1, 1997, Ring Co. issued $250,000, 14% bonds payable at a premium. The bonds are due in ten years. Interest is payable semiannually every June 30 and December 31. On December 31, 1997, and June 30, 1998, Ring made the semi-annual interest payments due and recorded interest expense and amortization of bond premium.

With the proceeds of the bond issuance, Ring retired other debt. Ring recorded a gain on the early extinguishment of the other debt.

Required:

Items 1 through 7, contained in the partially-completed amortization table below, represent formulas used to calculate information needed to complete the table. Select your answers from the following list of formulas. Each formula may be selected once, more than once, or not at all. "Stated interest rate" and "effective interest rate" are stated on an annual basis.

<table>
<thead>
<tr>
<th>Date</th>
<th>Cash paid</th>
<th>Interest expense</th>
<th>Amortization</th>
<th>Carrying amount</th>
<th>Unamortized premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/1/97</td>
<td></td>
<td></td>
<td></td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>12/31/97</td>
<td>(2)</td>
<td>$14,100</td>
<td>(3)</td>
<td>$349,100</td>
<td>(4)</td>
</tr>
<tr>
<td>6/30/98</td>
<td>$17,500</td>
<td>(5)</td>
<td>$3,536</td>
<td>(6)</td>
<td></td>
</tr>
</tbody>
</table>

9Q-26
Effective Annual Interest Rate:  (7)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Face amount x stated interest rate.</td>
<td>J</td>
</tr>
<tr>
<td>B</td>
<td>Face amount x effective interest rate.</td>
<td>K</td>
</tr>
<tr>
<td>C</td>
<td>Carrying amount x stated interest rate.</td>
<td>L</td>
</tr>
<tr>
<td>D</td>
<td>Carrying amount x effective interest rate.</td>
<td>M</td>
</tr>
<tr>
<td>E</td>
<td>Present value of face amount + present value of all future interest payments at date of issuance.</td>
<td>N</td>
</tr>
<tr>
<td>F</td>
<td>Carrying amount of bonds in the previous period – amortization for the current period.</td>
<td>O</td>
</tr>
<tr>
<td>G</td>
<td>Carrying amount of bonds in the previous period + amortization for the current period.</td>
<td>P</td>
</tr>
<tr>
<td>H</td>
<td>Cash paid – interest expense.</td>
<td>Q</td>
</tr>
<tr>
<td>I</td>
<td>Cash paid + interest expense.</td>
<td></td>
</tr>
</tbody>
</table>

**Items 8 through 11** describe amounts that will be reported in Ring's 1997 statement of cash flows prepared using the indirect method or disclosed in the related notes. For each item, select from the following list where the amount should be reported or disclosed. An answer may be selected once, more than once, or not at all.

*Statement of Cash Flows Items:*

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>Operating activities.</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Investing activities.</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Financing activities.</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>Supplemental schedule.</td>
<td></td>
</tr>
</tbody>
</table>

8. Proceeds received from sale of bonds.
9. Interest paid.
10. Amortization of bond premium.
11. Gain on early extinguishment of debt.
Chapter Nine
Solutions to Bonds, Accounting for Debt Questions

1. (c) At issuance, a bond is valued at the present value of the principal and interest payments, discounted at the prevailing market rate of interest at the date of issuance of the bond. Per ASC 405, "Interest on Receivables and Payables."

2. (c) Present value of interest payments per bond: 6.418 \times 60 = 385
   Present value of principal per bond: \(0.422 \times 1,000\) = 422
   Proceeds per bond = 807

3. (d) The issue price of any bond is equivalent to the present value (at the yield rate) of all cash payments (principal and interest) at the issue date.

4. (d) The requirement is to calculate the cash proceeds from the sale of bonds between interest dates:

   CASH PROCEEDS FROM:
   A. **BONDS** $600,000 \times 99\% = $594,000
   B. **ACCRUED INTEREST** $600,000 \times 10\% \times 3/12 = 15,000
      Total Cash Proceeds $609,000

5. (a) Proceeds of the bond issue—$300,000 \times .99 = 297,000
   Accrued interest—$300,000 \times 10\% \times 3/12 = 7,500
   Total cash received = $304,500

6. (d) All of the costs are directly related to the issuance of the bonds and should be recorded as bond issue costs. Other costs that may be considered bond issue costs are legal, accounting and other professional fees and registration costs.

7. (b) Issue costs $3,300
   No. of months bonds were outstanding in 1998 = 4
   No. of months bonds will be outstanding if held to maturity = 55
   1998 amortization = \(4/55 \times 3,300\) = $240

8. (b) Journal entry to record the first six months interest:
   Interest Expense (10\% \times 469,500 \times 6/12) = 23,475
   Interest Payable (9\% \times 500,000 \times 6/12) = 22,500
   Bond Discount = 975

The amount that West should report as bonds payable on its June 30, 2001, balance sheet is $470,475.
   (January 2 balance $469,500 + $975 Bond Amortization)

9. (b) Carrying value 5/1/99 ($1,000,000 + $62,000) = 1,062,000
   Yield rate for six months (10\% \times 6/12) \times 5\% = $53,100
   Interest expense at 10/31/99 = $53,100
   Interest Paid ($1,000,000 \times 11\% \times 6/12) = 55,000
   Premium amortization = $(1,900)
   Original premium = 62,000
   Unamortized Premium at 10/31/99 = $60,100
10. (c) The journal entry to record the interest and amortization of the bond premium for the year is:

<table>
<thead>
<tr>
<th>Account</th>
<th>($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond Premium</td>
<td>700</td>
</tr>
<tr>
<td>Interest Expense (a)</td>
<td>6,300</td>
</tr>
<tr>
<td>Cash (b)</td>
<td>7,000</td>
</tr>
</tbody>
</table>

a. Effective rate × CV at beginning of year = interest expense
   
   \[ 6\% \times \$105,000 = \$6,300 \]

b. Face interest × face value of bonds = cash interest
   
   \[ 7\% \times \$100,000 = \$7,000 \]

The balance in the bond premium account at June 30, 2000 would be the beginning balance less the amortization in the above journal entry ($5,000 - 700 = $4,300).

11. (c) Carrying value 7/1/97 $103,288

<table>
<thead>
<tr>
<th></th>
<th>($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield rate (10% × ½) × 5%</td>
<td>$5,164</td>
</tr>
<tr>
<td>Interest expense</td>
<td>$5,164</td>
</tr>
</tbody>
</table>

12. (d) Interest expense begins on June 1, 2000 when the bond is issued and continues for the seven months ending December 31, 2000.

13. (b) Interest payable is accrued at the stated interest of 8% for the three months since the last payment date of October 1.

\[ \$800,000 \times 0.08 \times 3/12 = \$16,000 \]

14. (c) When bonds are issued at a discount, using the straight-line method of amortization will cause interest expense to be greater in the first year than using the effective interest method (see chart in the chapter). Therefore, amortization under the straight-line method is greater causing the carrying value to be overstated. Since the expense was greater, retained earnings is understated.

15. (b) Carrying value of bonds at 6/30/99 is $4,980,000 ($5,000,000 + $30,000 – $50,000).

<table>
<thead>
<tr>
<th>Account</th>
<th>($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying value of the bonds</td>
<td>$4,980,000</td>
</tr>
<tr>
<td>Repurchase price (98% × $5,000,000)</td>
<td>4,900,000</td>
</tr>
<tr>
<td>Gain before taxes on redemption of bonds</td>
<td>$80,000</td>
</tr>
</tbody>
</table>

16. (a) The journal entry to record the retirement of the bonds:

<table>
<thead>
<tr>
<th>Account</th>
<th>($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JE Bonds Payable</td>
<td>600,000</td>
</tr>
<tr>
<td>Premium to Bonds</td>
<td>65,000</td>
</tr>
<tr>
<td>Cash*</td>
<td>612,000</td>
</tr>
<tr>
<td>Extraordinary Gain on Retirement of Bonds</td>
<td>53,000</td>
</tr>
</tbody>
</table>

* Cash Paid = $600,000 × 102% = $612,000

17. (d) Each transaction must be reported separately since the gain on early extinguishment of the company’s debt is reported as an ordinary item and the loss on the sale of the investment is an ordinary loss.

18. (c) The journal entry to record the conversion would be as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Account</th>
<th>($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/30/96</td>
<td>Bonds payable</td>
<td>$2,000,000</td>
</tr>
<tr>
<td></td>
<td>Premium on bonds payable</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>Common stock (80,000 shares × $20)</td>
<td>$1,600,000</td>
</tr>
<tr>
<td></td>
<td>APIC (residual)</td>
<td>450,000</td>
</tr>
</tbody>
</table>
19. (a) The journal entry to record the conversion would be as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/1/97</td>
<td>Bonds payable</td>
<td>$600,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Premium</td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Common stock (par)</td>
<td>*$300,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>APIC</td>
<td>**312,000</td>
<td></td>
</tr>
</tbody>
</table>

*10 x $600 x 50 = $300,000 (par value of shares issued)  
**$612,000 – $300,000 = $312,000 (book value of bonds converted less par value of shares issued)

20. (d) Using the book value method, no gain or loss is recognized. The journal entry for the conversion would be:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/30/95</td>
<td>Bonds payable</td>
<td>$1,000,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discount on bonds payable</td>
<td>$ 30,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Common stock (par)</td>
<td>800,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>APIC</td>
<td>170,000</td>
<td></td>
</tr>
</tbody>
</table>

21. (b) The book value method only transfers the carrying value of the bonds to equity and no differential exists. The market value method normally records the stock issued at its fair value at the date of conversion causing a difference between the book value of the bonds converted and the value of the stock issued. This difference is recognized as gain or loss.

22. (c) Since the stock warrants are detachable, the FMV provides an objective basis for the allocation of a portion of the cash proceeds to the stock warrants. The allocation is calculated as follows:

<table>
<thead>
<tr>
<th></th>
<th>Ratio to</th>
<th>Cash</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FMV</td>
<td>Total FMV</td>
</tr>
<tr>
<td>Bonds</td>
<td>1,080,000</td>
<td>1080k / 1200k = 90</td>
</tr>
<tr>
<td>Warrants</td>
<td>120,000</td>
<td>120k / 1200k = 10%</td>
</tr>
<tr>
<td>Total</td>
<td>1,200,000</td>
<td></td>
</tr>
</tbody>
</table>

Ratio attributable to the bonds 196/236 = .83

Amount allocated to bonds:

- .83 x 240,000 = $199,322
- Face value = 200,000
- Discount on bonds = $678

24. (d) Since no market value is given for the bonds, the amount attributable to the warrants (stockholders' equity) is $4 each x 30 warrants per bond = $120 x 500 bonds = $60,000.

25. (a) 500 warrants x 90% = 450 exercised for 1 share each.

- Option Price = $ 75
- Less: par value = 40
- Premium paid in per share = $ 35
- Times number of shares issued = 450
- Total premium paid at exercise = $15,750
- Add: warrants exercised (4,000 x 90%) = 3,600
- Total premium on shares issued = $19,350
26. (d) Term bonds are bonds that are due on a specific date. The 9¾% registered debentures and the 9½% collateral trust bonds are term bonds ($700,000 + $600,000 = $1,300,000). The 10% subordinated debentures are serial bonds.

27. (a) Serial bonds are those which retire over the life of the bond issue ($275,000 + $200,000). Debenture bonds are unsecured bonds ($275,000 + $125,000).

28. (d) ASC 405 requires that the aggregate maturities and sinking fund requirements be disclosed for each of five years after the balance sheet.

29. (d) Both of the liabilities would be reported as long-term since, at the time the statements were issued, the company clearly had the intent and the ability to convert the obligations to long-term commitments. The fact that the $500,000 refinancing had not yet been implemented at the date the statements were issued does not preclude the classification as long-term.

30. (c) ASC 405 states that the amount excluded from current liabilities through refinancing cannot exceed the amount actually refinanced. Therefore, Largo should consider the $500,000 paid by the refinancing to be a long-term liability and the $250,000 a current liability on the December 31, 1999 balance sheet. The refinancing was completed before the issuance of the financial statements and meets both criteria (intent & financial ability) for the classification of the $500,000 as a long-term liability.

31. (c) Normally this note would be classified as a current liability. However, ASC 405 states that if Cali Inc. intends to refinance the note and has the ability to refinance the obligation within one year, the note should be classified as noncurrent. The ability to refinance must be demonstrated by either accomplishing the refinancing or entering into an agreement to do so before the financial statements are issued. In this case, Cali Inc. refinanced the note (accomplished the refinancing) on January 28, 2002 before the financial statements were issued. Therefore, both the intent and ability criteria were met and the note should be classified on the December 31, 2001 balance sheet as noncurrent with a separate disclosure of the criteria used in making the classification decision.

32. (a) Current liabilities are obligations that are expected to be paid within one year of the operating cycle whichever is longer.

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>$15,000</td>
</tr>
<tr>
<td>Bonds less discount</td>
<td>22,000</td>
</tr>
<tr>
<td>Dividends payable</td>
<td>8,000</td>
</tr>
<tr>
<td><strong>Total liabilities 12/31/99</strong></td>
<td><strong>$45,000</strong></td>
</tr>
</tbody>
</table>

The notes payable are not classified as current liabilities because they are not due until 2001.

33. (d) Since the sinking fund is restricted for the payment of bonds, it is not available for the payment of current liabilities and cannot be considered a current asset. Therefore, it is classified as a non-current asset.

34. (c) Carrying value 7/1/04 $369,200

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield rate—10% × 1/2 =</td>
<td>5%</td>
</tr>
<tr>
<td>Interest revenue for 2004</td>
<td>18,460</td>
</tr>
<tr>
<td>Interest receivable at 12/31/04</td>
<td>16,000</td>
</tr>
<tr>
<td>Amortization</td>
<td>2,460</td>
</tr>
<tr>
<td>Carrying value at beginning of the period</td>
<td>369,200</td>
</tr>
<tr>
<td>Carrying value 12/31/04</td>
<td>$371,660</td>
</tr>
</tbody>
</table>
35. (b) Assume for simplicity that the face amount of the bonds is $100,000. The journal entry to record the sale would be:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>114,000</td>
</tr>
<tr>
<td>Investment-Carrying value (a)</td>
<td>92,000</td>
</tr>
<tr>
<td>Gain on sale of bonds</td>
<td>22,000</td>
</tr>
</tbody>
</table>

a. CV of Bonds = Cost + Discount Amortization

\[
92,000 = 90,000 + 2,000
\]

36. (b) Example—A $100,000 bond purchased at a cost of $95,000 plus the additional cash paid for accrued interest of $5,000 = cash paid of $100,000. Therefore, the $95,000 carrying value is less than the cash paid to the seller (a \( b \)) and less than the face value (b \( c \))

37. (d) The carrying value is highest if the bonds were purchased above face value (at a premium). When the interest method of amortization is used, the lowest amount of amortization is recorded in the first year, such amount being less than using the straight-line method (see amortization table in the chapter). Therefore, the carrying value of the investment would be higher using the interest method.

38. (a) The key words are "reasonably possible". ASC 450 states that if a loss contingency is reasonably possible, it should be **disclosed but not accrued**. A loss contingency is accrued only if the loss contingency is probable and the amount of the loss can be reasonably estimated.

39. (b) Since no amount was accrued, the loss was not probable, but since a range of potential loss was disclosed, the loss is reasonably possible.

40. (a) The minimum amount within the range must be accrued since an unfavorable outcome is probable.

41. (d) When a contingent loss is probable but counsel can only estimate a range of losses, Steel Co. should accrue the lower end of the range ($500,000) and disclose the possibility of an additional loss up to $500,000. ASC 450.

42. (c) Current liabilities are obligations that are expected to be paid within one year or the operating cycle whichever is longer. The current liabilities on the December 31, 2000, balance sheet are calculated as:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>$ 55,000</td>
</tr>
<tr>
<td>Unsecured notes - due 7/1/01</td>
<td>400,000</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>35,000</td>
</tr>
<tr>
<td>Serial Bonds - due 3/31/01</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Liabilities 12/31/01</td>
<td>$1,490,000</td>
</tr>
</tbody>
</table>

The contingent liability is not a liability at this point because Brite Corp. considers the loss to be **possible** but not probable. Since the deferred tax liability is not related to an asset for financial reporting, the reversal date is used to classify the liability as either current or noncurrent. In this case the reversal date is 2002 and the deferred tax liability is classified as noncurrent.

43. (a) Loss contingencies are classified as probable, reasonably possible and remote. Remote contingencies are generally not disclosed. ASC 450 makes an exception for guarantees of indebtedness. Guarantees of indebtedness must be disclosed even though the probability of loss is remote. Remote contingencies are never accrued.

44. (a) As a general rule, gain contingencies are not recognized until realized. In the first case the defendant is only appealing $30,000 of the $45,000 award so $15,000 should be recognized as a pretax gain on the 1999 financial statements. In the second case the total award is being appealed so none of the $50,000 should be recognized as a pretax gain.
45. (c)  

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escrow liability 1/1/99</td>
<td>$700,000</td>
</tr>
<tr>
<td>Add payments received in 1999</td>
<td>$1,580,000</td>
</tr>
<tr>
<td>Int. on escrow funds - 1999 (a)</td>
<td>$45,000</td>
</tr>
<tr>
<td>Less payment made in 1999</td>
<td>($1,720,000)</td>
</tr>
<tr>
<td>Escrow liability 12/31/99</td>
<td>$605,000</td>
</tr>
</tbody>
</table>

(a) Interest of $50,000 is reduced by 10% service fee ($50,000 – 5,000 = $45,000).

46. (a) ASC 825 requires disclosure of information about significant concentrations of risk **for all financial instruments**. Concentrations of credit exist when a company has a business activity, economic characteristic, or location that is common to most of its financial instruments.

47. (c) ASC 405 states that the aggregate amount of payments for unconditional purchase obligations that have been recognized on the purchaser’s balance sheet shall be disclosed for each of the **five years** following the date of the latest balance sheet.

48. (d) The payroll tax liability consists of the federal tax withheld, $1,200, the FICA tax withheld, $700, and the employer's share of the FICA, $700, for a total of $2,600. The payroll tax expense would be the employer's share of the FICA, which is $700.

49. (a) The December 31, 2000 accrued liability for unemployment claims should be the number of employees times $10,000 times 2% rate (5 × $10,000 × 2%) = $1,000.

50. (d) A sole proprietorship is not a taxable entity and is not required to record a provision for income taxes. Income from a sole proprietorship will be taxed on the owner's individual tax return.

51. (d)  

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997 and 1998 sales</td>
<td>$400,000</td>
</tr>
<tr>
<td>Warranty % =</td>
<td>6%</td>
</tr>
<tr>
<td>1997 and 1998 allowance</td>
<td>$24,000</td>
</tr>
<tr>
<td>Actual expenditure</td>
<td>$9,750</td>
</tr>
<tr>
<td>12/31/98 remaining liability</td>
<td>$14,250</td>
</tr>
</tbody>
</table>

52. (d) Under the accrual accounting, the warranty costs should be recognized in the same accounting period (matching) as the revenue is recognized. In this case, a proper matching of revenue vs. expense would be to recognize the warranty costs when the **machines are sold**. Answers (a), (b), and (c) all recognize revenue in the current period and the warranty costs in a later period which would not be matching.

53. (b) All redemptions of the first series of coupons are final since the latest date of submission would be 7/30/94. From the second series of coupons the liability at 12/31/94 would be as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>$120,000</td>
</tr>
<tr>
<td>Probability of redemption</td>
<td>40%</td>
</tr>
<tr>
<td>Total expected cost of promotion</td>
<td>$48,000</td>
</tr>
<tr>
<td>Paid during 1994</td>
<td>$40,000</td>
</tr>
<tr>
<td>Balance due</td>
<td>$8,000</td>
</tr>
</tbody>
</table>
54. (a)  

**PROJECTED COUPONS RETURNED:**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packages of candy sold</td>
<td>110,000</td>
</tr>
<tr>
<td>Times Expected Redemption Rate</td>
<td>x 60%</td>
</tr>
<tr>
<td>Equals Projected Coupons Returned</td>
<td>66,000</td>
</tr>
<tr>
<td>Divided by Coupons Required for each toy</td>
<td>5 coupons</td>
</tr>
</tbody>
</table>

**EQUALS EXPECTED TOYS TO BE MAILED** = 13,200 Toys

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Times cost per toy ($0.80 - .50)</td>
<td>x 0.30</td>
</tr>
</tbody>
</table>

**LIABILITY ON BALANCE SHEET AT December 31, 2001** $3,960

55. (b) As gift certificates are sold, the deferred revenue account increases. As the gift certificates are redeemed or lapse, revenue is recognized and the liability account is reduced.

56. (d) Two key points: The 1997 certificates that were not redeemed by December 31, 1998 have expired and Regal’s total liability for 1998 sales is for the 90% of the certificates that are expected to be returned. The approach is to set up a T-account for the unearned revenue.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNEARNED REVENUE</strong></td>
<td></td>
</tr>
<tr>
<td>12/31/97 balance $75,000</td>
<td></td>
</tr>
<tr>
<td>1997 redeemed $25,000</td>
<td></td>
</tr>
<tr>
<td>1997 expired 50,000</td>
<td></td>
</tr>
<tr>
<td>1998 sales</td>
<td>(225,000)</td>
</tr>
<tr>
<td>1998 redeemed $175,000</td>
<td></td>
</tr>
<tr>
<td>12/31/98 balance $50,000</td>
<td></td>
</tr>
</tbody>
</table>

57. (d) Issue price of the bonds ($200,000 x 1.01) $202,000

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued interest ($200,000 x 0.09 x 5/12)</td>
<td>+ 7,500</td>
</tr>
<tr>
<td>Total proceeds from bond issue</td>
<td>$209,500</td>
</tr>
</tbody>
</table>

58. (d) ASC 450 states that gain contingencies should not be recognized until realized. Gain contingencies should be disclosed but the disclosure should be made in a careful and responsible manner in order to avoid misleading implications as to the likelihood of realization.

59. (a) The expense on the bond issue is based upon the number of months that the bonds have been outstanding during the year; in this case, since June 1, 1998. The dates on which interest is paid is not significant in this question.

60. (c) Since the debt was refinanced to the extent of $1,500,000 prior to the issuance of the financial statements, the liability is classified as long-term to the extent of the refinancing.

61. (d)  

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond Issue Cost 1/2/99</td>
<td>$250,000</td>
</tr>
<tr>
<td>Less amortization</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>$250,000 / 10 years (25,000)</td>
</tr>
<tr>
<td>2000</td>
<td>$250,000 / 10 years x 6/12 (12,500)</td>
</tr>
<tr>
<td>Balance</td>
<td>6/30/00</td>
</tr>
</tbody>
</table>

62. (c) The liability balance at 12/31/97 should include those subscriptions for periods after that date.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998 expirations ($125,000 + $200,000)</td>
<td>$325,000</td>
</tr>
<tr>
<td>1999 expirations</td>
<td>140,000</td>
</tr>
<tr>
<td>Total</td>
<td>$465,000</td>
</tr>
</tbody>
</table>
63. (a) ASC 450 states that a contingent loss should be accrued if the loss is **probable** and the amount of the loss is reasonably estimable. In this case, the loss is probable and a reasonable estimate of the loss is $200,000. This is the amount of the accrued liability that should appear on the December 31, 2001 balance sheet. In addition, Haft Co. should **disclose** the possibility of an additional loss of $100,000 which would bring the total potential loss to $300,000.

64. (d) Convertible bonds are debt securities reported entirely as a liability.

65. (c) The book value method records the stock issued at the book value of the converted bonds. There is no gain or loss recognized. The market value method results in recognized gain or loss usually based upon the difference between the fair market value of the stock issued compared to the carrying value of the converted bonds. The face value of the bonds was equal to the par value of the stock when the bonds were issued. At the time of conversion, the common stock had increased in value. Therefore, using the market value method to record the conversion results in a loss (credits to equity accounts are greater than debits to the bond liability account).

66. (a)

<table>
<thead>
<tr>
<th>Account Payable Balance before Adjustments</th>
<th>$360,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add: Debit balance in A/P to Ross is an asset to Lyle and should be taken out of A/P</td>
<td>50,000</td>
</tr>
<tr>
<td>Add: Checks written by Lyle and recorded as a reduction in A/P on December 29, 1999, should be added back to the A/P because the checks were not mailed until January 5, 2000.</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

Adjusted A/P balance - December 31, 1999

67. (a) Interest revenue is $906,000 × 10% × 6/12 = $45,300

Interest receivable is $1,000,000 × 8% × 6/12 = 40,000

Amortization of bond discount 5,300

Cost of investment in bonds 7/1/99 $906,000

Investment in bonds 12/31/99 $911,300

68. (a) Amortization schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Interest Revenue</th>
<th>Cash Receipt</th>
<th>Amortization</th>
<th>Carrying Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/95</td>
<td>$45,600*</td>
<td>$40,000</td>
<td>$5,600</td>
<td>$456,200</td>
</tr>
<tr>
<td>12/31/95</td>
<td>$46,200*</td>
<td>40,000</td>
<td>6,200</td>
<td>461,800</td>
</tr>
<tr>
<td>12/31/96</td>
<td></td>
<td></td>
<td></td>
<td>468,000</td>
</tr>
</tbody>
</table>

*Rounded per instructions

69. (b) ASC 405 indicates that "if amounts that could be obtained under the financing agreement fluctuate (in proportion to the value of collateral), the amount to be excluded from current liabilities shall be limited to ... the minimum amount expected to be available ...". Therefore, in this case, only 80% of $1,200,000, or $960,000, could be classified as long-term.

70. (a) Under the book value approach, the book value of the bonds is transferred to stockholders’ equity. This amount is allocated between the common stock account at par and the additional paid-in capital account.

71. (a) When the warrants are exercised, the carrying value of the warrants and the cash received are debited and the par value and APIC is credited for the same total amount. The carrying value of the warrants is a transfer from one equity account to another. Therefore, total equity is increased only by the cash received.
72. (d) Bond premium at issue $40,000

Amortization of premium 1/1/91 through 7/1/96:

$40,000 ÷ 20 = $2,000 per period

$2,000 × 11 periods 22,000

Unamortized premium 7/1/96 $18,000
Face value +1,000,000
Carrying value 7/1/96 $1,018,000
Call (redemption) price 1,010,000 $1,000,000 × 1.01
Gain on extinguishment $8,000

73. (a) ASC 450, following the concept of conservatism, states that gain contingencies should not be recognized in the financial statements until realized. Adequate disclosure should be made in the footnotes but care should be taken to avoid misleading implications as to the likelihood of realization of the contingent gain.

74. (d) Interest expense for 12/31/00 = 10% × $190,280 = $19,028
Cash payment for interest 16,000
Amortization of discount 3,028
Payment for bond dated 12/31/00 40,000
Net decrease in carrying value $36,972
Original carrying value at issuance 190,280
Carrying value at 12/31/00 $153,308

75. (d) Price per share ex-warrants $72
Price per warrant 8
Total $80

Carrying value assigned to warrants: 8/80 × $152,000 = $15,200

Selling price $20,500
Carrying value 15,200
Gain 5,300

76. (b) In the early years of the bond's life, the straight-line method of bond amortization will result in a higher interest expense and higher discount amortization than the effective interest method. Thus, the bond amortization will be overstated in 2001 which will cause an overstatement of the bonds at December 31, 2001. However, both the straight-line method and the effective interest method will amortize the bond discount to zero by January 2, 2007 and the carrying amount of the bonds will be $1,000,000 for both amortization methods. Therefore, the effect of the error in amortization methods will not have any effect on the carrying value of the bonds at January 2, 2007.

77. (b) The bonds were sold at 97 and their carrying value would be $388,000 ($400,000 × 97% = $388,000). The journal entry is:

Cash 396,000
Bond Discount 12,000
Bonds Payable 400,000
Accrued Interest Payable 8,000

78. (c)

<table>
<thead>
<tr>
<th>Liability for Stamp Redemptions (000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996 redemptions of pre-96 stamps $2,750</td>
</tr>
<tr>
<td>1996 sales, $2,250 × .8 Additional liability for</td>
</tr>
<tr>
<td>1,800</td>
</tr>
<tr>
<td>$5,050 Balance 12/31/96</td>
</tr>
</tbody>
</table>

9S-9
79. (d) The interest payable at September 30, 1999 will be for the three month's interest that has accrued since the last interest was paid on June 30, 1999 ($300,000 × 12% × 3/12 = $9000).

80. (b) The fair market value of the bonds is given at $40,000 but the FMV of Cove’s stock cannot be determined because it is a closely-held corporation. The bond is recorded at FMV and the remainder of the proceeds ($70,000) is assumed to be the FMV of the stock. Since there are 1,000 shares of common stock at a par value of $5 each, a total of $5,000 would be allocated to the common stock account and the remaining $65,000 would be credited to additional paid-in capital.

81. (b) KEY POINT: At January 3, 2001, Hudson Hotel has a liability for sales taxes for both November and December. Therefore, the sales tax payable would be 15% × ($110,000 + 150,000) = $39,000. The liability for occupancy taxes at December 31, 2000 would be the room nights for October, November, and December times the $2 per night occupancy tax.

\[(1,110 + 1,200 + 1,800) \times $2 \text{ per night} = $8,200\]

82. (c) Since the appropriation will result in a gain, the transaction is disclosed in the notes to the financial statements and recognized only when realized.

83. (b) The key point is that Ivy Co. includes its sales taxes in the sales revenue account:

Sales including sales tax $26,500
Divided by 106%

Equals Taxable Sales $25,000
Times the sales tax rate \( x \) 6%

Equals Total Sales Tax Payable $1,500
Less Sales Taxes already paid (600)

Sales Tax Payable at March 31, 2002 $900

84. (b) Original cost of Adams investment in stock to be allocated between the original stock investment and the rights is $5,000 (50 shares × $100 per share).

<table>
<thead>
<tr>
<th>Allocation of Cost to rights</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FMV of stock ex-rights</td>
<td>$132</td>
</tr>
<tr>
<td>FMV of rights</td>
<td>18</td>
</tr>
<tr>
<td>Total FMV</td>
<td>$150</td>
</tr>
</tbody>
</table>

\[\frac{\text{Value of Rights}}{\text{Total Cost}} = \frac{18}{5,000} = \frac{600}{600} \text{ Cost Assigned to rights.}\]

Value of Rights and Stock 150

<table>
<thead>
<tr>
<th>Cost of each new share purchased with rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash payment</td>
</tr>
<tr>
<td>Add: cost of rights ($600 ÷ 50 = $12 × 2 rights)</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

85. (b) The note payable-contest winner should be reported on the December 31, 2000 balance sheet at the present value of future payments or $418,250.

86. (c) The amount reported on the 2000 income statement for contest prize expense should be the $468,250 which is the first installment plus the present value of the future payments ($50,000 + $418,250 = $468,250).
87. (d) Six months interest revenue at stated rate.

\[
\begin{align*}
8\% \times \frac{1}{2} \times $500,000 &= $20,000 \\
\text{Amortization recorded} &= 1,800 \\
\text{Revenue for 1996} &= $21,800
\end{align*}
\]

Since no yield rate was given, the $1,800 amortization must be accepted. Note that the amortization is added to the stated revenue amount since the bonds were acquired at a discount.

88. (c) Since the minimum coverage for collateral during 1998 was $480,000 \((80\% \times $600,000)\), only that amount can be reported as long-term. The other $20,000 must be reported as a current liability.

89. (c) An interest rate swap agreement involves the exchange of cash flows determined by various interest rates. Fluctuations in interest rates after the agreement is entered into may result in the risk of exchanging a lower interest rate for a higher interest rate. Financial instruments, including swaps, also bear credit risk or the risk that a counterparty to the agreement will not perform as expected.

90. (c) According to ASC 825, para 14, if it is not practicable for an entity to estimate the fair value of a financial instrument, (1) information pertinent to estimating fair value and (2) the reasons why it is not practicable to estimate fair value, should be disclosed. Therefore, answer (c) is correct.

91. (c) Interest Income = Effective Interest Rate \times December 1 carrying value \times 1 month

\[
= 12.4\% \times $194,000 \times 1/12
= $2004.66 \text{ or } $2005.00 \text{ rounded}
\]

92. (d) A bond issued at a discount reflects that the market rate is greater than the contract rate.

93. (d) ASC 815 requires that gains or losses on hedges of foreign currency exposure of an available-for-sale security must be recognized currently. Choices (a), (b) and (c) are examples of losses that would be included in comprehensive income.

94. (a) Examples of an "underlying" include a specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates on other variables. An "underlying" may be a price or rate of an asset or liability, but is not the asset or liability itself.

Choices (b) and (c) are examples of notional amounts and an embedded derivative is not related to the question.

95. (c) ASC 815 requires that gain or losses from forecasted cash flow hedges be reported as other comprehensive income.

96. (c) The net effect on 1999 earnings of the gain from the derivative and the loss in the fair value of the asset is $20,000 \(($220,000 - $200,000 = $20,000)\).

97. (d) Helgeson's purchase of a futures contract to hedge against future market fluctuations would include the three elements in the ASC 815 – Definition of a Derivative.

The future's contract would have an underlying (price per pound of cocoa beans) and a notional amount (number of pounds of cocoa beans); no initial investment; and the net settlement amount of the futures contract.

98. (b) The $15,000 gain on the derivative in 1999 is recognized in comprehensive income until the transaction is completed. When the transaction is completed in 2000 (the corn is sold), the $15,000 gain is reclassified in 2000 from other comprehensive income to current earnings. This reclassification plus the $8,000 gain in January would total at $23,000 gain in 2000 \(($15,000 + $8,000 = $23,000)\).

99. (a) Answer (a) is the ASC 815 definition of a derivative.
100. (d) Since the event occurred in 2001, the loss of the litigation should be charged to the year 2001 and the accrued liability shown on the December 31, 2001, balance sheet. Because Ace Co. knew the actual amount of the settlement before the financial statements for 2001 were released, the actual amount of the loss should be accrued. Since the transaction covered two calendar years and is complicated, the details and dates should be disclosed in the footnotes.

101. (d) **Key Point:** When a company is in violation of a loan agreement, the loan immediately becomes a demand note which is a current liability. Therefore, all of these accounts are current liabilities: $750,000 + $400,000 + $3,500,000 + $1,000,000 = $5,650,000.

102. (d) The issue price of a bond is always the present value of future cash flows (discounted amount) at the market rate of interest. The issue price of the bonds less the bond issue cost is the net proceeds. Answers (a) and (c) are incorrect because they use the stated rate of interest. Answer (b) is wrong because it does not deduct the bond issues cost.

103. (a) If it is practicable to estimate the values, ASC 820 requires entities to disclose the fair value of its financial instruments regardless of whether they are recognized or not on the entity’s financial statements.

If it is not practical to estimate these fair values, descriptive information about the financial instruments such as the terms of the instrument and why it is not possible to estimate the fair value should be provided.

It is important to note that the disclosure of fair values are provided as supplemental information and do not normally replace the historical cost basis used on the balance sheet. (An exception to this traditional reliance on historical cost is the valuing of certain investments in debt and equity securities at fair market value. See ASC 320 in chapter 2).

104. (a) The amount needed to cover the net payroll and related payroll taxes should be the $20,000 gross wages plus the employer’s share of the FICA taxes (7% x $20,000 = $1400) for a total of $21,400.

105. (a) Cado’s share of payroll taxes are:

A. Cado’s matching share of the FICA taxes
   \[ \frac{80,000 \times 7\%}{\text{Total}} = 5,600 \]

B. 100% of the unemployment taxes
   \[ \frac{20,000 \times 3\%}{\text{Total}} = 600 \]

   **Total** $6,200

106. (c) $1,000,000 x 9% x 3/12 = $22,500

107. (b)

<table>
<thead>
<tr>
<th>Principal</th>
<th>Jan 1 Year 1</th>
<th>$10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>Year #1</td>
<td>$1,000</td>
</tr>
<tr>
<td>10,000 x 10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accumulated Balance Dec 31 year #1</td>
<td>11,000</td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>Year #2</td>
<td>$1,100</td>
</tr>
<tr>
<td>11,000 x 10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accumulated Balance Dec 31 year #2</td>
<td>12,100</td>
<td></td>
</tr>
</tbody>
</table>

9S-12
108. (d) Interest-rate swaps, currency futures and stock-index option are all examples of derivative financial instruments on hedges. The Bank certificate of deposit is not considered a derivative or hedge.

109. (c) The total interest expense over the life of a debt equals the cash interest plus the discount. Remember the Journal Entry.

   JE Interest Expense XX
   Discount XX
   Cash XX

110. (b) Serial bonds require periodic payment of principal. For example, a ten-year $1,000,000 serial bond would require annual payments of $100,000 per year. Debenture bonds are unsecured bonds. Term bonds are bonds due at the end of a given term. For example a 5-year term bond would be due at end of 5 years. Sinking fund bonds require that a sinking fund be established to accumulate monies for the retirement of the bond.

111. (a) A perfect hedge is a situation in which there is no possibility of future gain or loss.

112. (b). No value is assigned to the conversion feature when convertible debt is issued because there is not an objective basis for determining its value. In the study of derivatives this is called an "embedded derivatives."

113. (c) A loss contingency that is probable and the amount can be reasonably estimated should be accrued by debiting the loss and crediting a liability. If the legal counsel gives a range of losses ($1,000,000 to $1,500,000) the company usually accrues the low end of the range ($1,000,000). But, if the counsel picks a most likely amount within the range ($1,300,000) that is the amount that should be accrued.

114. (b) The book value of the bond of $900,000 ($1,000,000 - 100,000) is transferred to the stockholder's equity. The JE would be as follows:

   JE Bond Payable 1,000,000
   Bond Discount 100,000
   Common Stock Par $1 100,000*
   Paid in Capital in Excess of Par 800,000

*100,000 shares of stock times $1 par = $100,000

115. (c) The accounts payable is obviously a current liability of $30,000. The short-term construction loan was refinanced into a long-term bond of $100,000. Under ASC 405 if the refinancing was done after the balance sheet date but before the financial statements were released, it should be considered a long-term liability.

116. (b) The current portion ($16,000) of the mortgage note payable is a current liability. Since the company is refinancing the short-term debt, it is considered a long-term liability. The temporary difference from depreciation is caused by either plant or equipment which are classified as longer term assets. Since the item which caused the deferred tax liability is long-term, then the deferred tax liability is classified as long-term.

117. (d) On the accrual basis the warranty expense is 2% x $300,000 = $6,000.
118. (b) A bond is issued at a bond discount if the stated interest is less than the market or effective interest rate. Therefore interest expense is the interest paid plus the amortization of the bond discount.

119. (a) The journal entry is as follows:

\[
\begin{array}{ccc}
\text{JE} & \text{Cash} & 49,000 \\
 & \text{Bond Discount} & 1,000 \\
 & \text{Bonds Payable (Face Value)} & 50,000 \\
\end{array}
\]

Note: The cash received is 98% x $50,000 = $49,000. The bond discount is the difference between the face value of the bond ($50,000) and the amount of cash received ($49,000) for a bond discount of $1,000.

120. (b) The amortization of a discount or a note would increase interest expense.

\[
\begin{array}{ccc}
\text{JE} & \text{Interest Expense} & XX \\
 & \text{Discount on Note} & XX \\
 & \text{Interest Payable} & XX \\
\end{array}
\]

121. (c) Since the bank loan will be refinanced on January 15 before the financial statements are released on February 28, Year 2 and the first payment on the new loan is not due until January 15, Year 3, the old bank loan should be classified as a long-term liability on December 31, Year 1. Therefore, the current liabilities are the accounts payable of $750,000, the short-term borrowing of $400,000 and the current portion ($100,000) of the mortgage payable for a total of $1,250,000.

122. (b) IFRS requires that the obligation be split between a $570,000 bond liability and a $30,000 equity account.

123. (c) IFRS defines a provision as more likely than not.

124. (d) The accrued is for the mid-point of the range.
Chapter Nine
Solutions to Bonds, Accounting for Debt Problems

NUMBER 1

<table>
<thead>
<tr>
<th>Bond/Discount</th>
<th>Bond/Premium</th>
<th>Bonds/Payable</th>
<th>Common Stock</th>
<th>Paid-in Capital</th>
<th>Retained Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Increased</td>
<td>No Effect</td>
<td>Increased</td>
<td>No Effect</td>
<td>No Effect</td>
</tr>
<tr>
<td>2</td>
<td>No Effect</td>
<td>Increased</td>
<td>No Effect</td>
<td>No Effect</td>
<td>No Effect</td>
</tr>
<tr>
<td>3</td>
<td>No Effect</td>
<td>Decrease</td>
<td>Decrease</td>
<td>Increased</td>
<td>No Effect</td>
</tr>
<tr>
<td>4</td>
<td>Increased</td>
<td>No Effect</td>
<td>No Effect</td>
<td>Increased</td>
<td>No Effect</td>
</tr>
<tr>
<td>5</td>
<td>No Effect</td>
<td>No Effect</td>
<td>Increased</td>
<td>Increased</td>
<td>Decrease</td>
</tr>
</tbody>
</table>

1. If bonds are issued with a nominal (face) rate of interest that is less than the market rate of interest, the bonds will be issued at a discount. The journal entry is:

   Cash xxx
   Bond discount xxx
   Bonds payable xxx

   Therefore, both the bond discount and the bonds payable are increased.

2. If convertible bonds are issued at an amount in excess of the bonds' face value, the bonds are issued at a premium.

   Cash xxx
   Bond premium xxx
   Bonds payable xxx

   Therefore, both the bond premium and the bonds payable accounts are increased.

3. If convertible bonds are converted to common stock using the book value method, a gain or loss on conversion is not recognized.

   Bonds payable xxx
   Bond premium xxx
   Common stock-par xxx
   PIC - Excess of par xxx

   Therefore, the bonds payable and bond premium are decreased and the common stock and PIC - excess of par are increased.

4. If bonds are issued at FACE VALUE with detachable stock warrants that have a determinable value, a portion of the cash proceeds will be allocated to the stock warrants and the bonds will be sold at a discount.

   Cash xxx
   Bond discount xxx
   Bonds payable xxx
   PIC - Stock warrants xxx

   Therefore, the bond discount, bonds payable and PIC - stock warrant accounts increased.
5. If a 2% stock dividend is declared and issued, the dividend is considered a small stock dividend and the amount of retained earnings capitalized is the FMV of the stock. In this case the FMV is in excess of par.

\[
\begin{align*}
\text{Retained earnings} & \quad xxx \\
\text{Common stock - par} & \quad xxx \\
\text{PIC - excess of par} & \quad xxx
\end{align*}
\]

Therefore, retained earnings would decrease while common stock and paid-in-capital would increase.

**NUMBER 2**

a.

*Lino Corporation*

**LONG-TERM LIABILITIES SECTION OF BALANCE SHEET**

*December 31, 1994*

10% note payable to bank, due in annual installments of $200,000, less current installment $ 400,000 (1)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liability under capital lease, net present value of lease payments, less current installment</td>
<td>160,768 (2)</td>
</tr>
<tr>
<td>10% bonds payable due July 1, 2004, less unamortized discount of $243,750</td>
<td>756,250 (3)</td>
</tr>
<tr>
<td>Deferred income taxes</td>
<td>115,000 (4)</td>
</tr>
<tr>
<td><strong>Total long-term liabilities</strong></td>
<td>$1,432,018</td>
</tr>
</tbody>
</table>

b.

*Lino Corporation*

**INTEREST EXPENSE**

*For the Year Ended December 31, 1994*

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note payable to bank</td>
<td>$ 75,000 (5)</td>
</tr>
<tr>
<td>Liability under capital lease</td>
<td>44,800 (2)</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>56,250 (3)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$176,050</td>
</tr>
</tbody>
</table>

**Explanations of Amounts**

1. **10% Note Payable to bank**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note payable, 12/31/93</td>
<td>$800,000</td>
</tr>
<tr>
<td>Less installment paid 10/1/94</td>
<td>200,000</td>
</tr>
<tr>
<td><strong>Balance, 12/31/94</strong></td>
<td>$600,000</td>
</tr>
<tr>
<td>Less current installment due 10/1/95</td>
<td>200,000</td>
</tr>
<tr>
<td><strong>Long-term portion, 12/31/94</strong></td>
<td>$400,000</td>
</tr>
</tbody>
</table>

2. **Liability under capital lease**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liability under capital lease, 12/31/93</td>
<td>$280,000</td>
</tr>
<tr>
<td>Less principal portion of 12/31/94 payment</td>
<td>$100,000</td>
</tr>
<tr>
<td>Lease payment</td>
<td>$100,000</td>
</tr>
<tr>
<td>Less imputed interest ($280,000 × 16%)</td>
<td>44,800</td>
</tr>
<tr>
<td><strong>Balance, 12/31/94</strong></td>
<td>$224,800</td>
</tr>
<tr>
<td>Less current principal payment due 12/31/95</td>
<td>100,000</td>
</tr>
<tr>
<td>Lease payment</td>
<td>100,000</td>
</tr>
<tr>
<td>Less imputed interest ($224,800 × 16%)</td>
<td>35,968</td>
</tr>
<tr>
<td><strong>Long-term portion, 12/31/94</strong></td>
<td>$160,768</td>
</tr>
</tbody>
</table>
(3) Bonds payable
   Bonds payable issued 7/1/94 $750,000
   Add amortization of bond discount
   Effective interest ($750,000 × 15% × 6/12) 56,250
   Less accrued interest payable 12/31/94
   ($1,000,000 × 10% × 6/12) 50,000
   Balance, 12/31/94 $756,250

(4) Deferred income taxes
   Deferred income taxes, 12/31/93 $100,000
   Add timing difference—excess of tax depreciation
   over book depreciation of $50,000 × 30%
   Balance, 12/31/94 $115,000

(5) Interest expense on note payable to bank
   1/1/94 to 9/30/94 ($800,000 × 10% × 9/12) $ 60,000
   10/1/94 to 12/31/94 ($600,000 × 10% × 3/12) 15,000
   Interest, year ended 12/31/94 $ 75,000

NUMBER 3

Part a.
1. MyKoo Corporation

   SCHEDULE OF TOTAL AMOUNT RECEIVED FOR SERIAL BOND

   Present value of interest to be paid at the end of each year
   for 5 years at an annual yield of 6% computed as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Bonds outstanding</th>
<th>Interest</th>
<th>Present value at 5%</th>
<th>Present value factor at 6%</th>
<th>Present value of interest payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/92</td>
<td>$1,000,000</td>
<td>$50,000</td>
<td>.9434</td>
<td>.9586</td>
<td>$47,170</td>
</tr>
<tr>
<td>12/31/93</td>
<td>800,000</td>
<td>40,000</td>
<td>.8900</td>
<td>.9388</td>
<td>35,600</td>
</tr>
<tr>
<td>12/31/94</td>
<td>600,000</td>
<td>30,000</td>
<td>.8396</td>
<td>.8925</td>
<td>25,188</td>
</tr>
<tr>
<td>12/31/95</td>
<td>400,000</td>
<td>20,000</td>
<td>.7921</td>
<td>.8485</td>
<td>15,842</td>
</tr>
<tr>
<td>12/31/96</td>
<td>200,000</td>
<td>10,000</td>
<td>.7473</td>
<td>.8021</td>
<td>7,473</td>
</tr>
</tbody>
</table>

   Total present value of interest payments $131,273

   Present value of amount to be paid on January 1 each year
   for 5 years at an annual yield of 6% ($200,000 × 4.2124) $842,480

   Present value (amount received) of all payments $973,753
2.

**MyKoo Corporation**

**AMORTIZATION OF BOND DISCOUNT**

**Interest (Effective Rate) Method**

<table>
<thead>
<tr>
<th>(A) Carrying value of bonds $1,000,000</th>
<th>(B) Effective interest expense (6% × A)</th>
<th>(C) Interest payments</th>
<th>(D) Amortization of bond discount (B − C)</th>
<th>(E) Cumulative balance (E − D)</th>
<th>(F) Cumulative principal payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue $973,753</td>
<td></td>
<td>$26,247</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 782,178</td>
<td>$58,425</td>
<td>$50,000</td>
<td>$8,425</td>
<td>17,822</td>
<td>$200,000</td>
</tr>
<tr>
<td>2 589,108</td>
<td>46,930</td>
<td>40,000</td>
<td>6,930</td>
<td>10,892</td>
<td>400,000</td>
</tr>
<tr>
<td>3 394,454</td>
<td>35,346</td>
<td>30,000</td>
<td>5,346</td>
<td>5,546</td>
<td>600,000</td>
</tr>
<tr>
<td>4 198,121</td>
<td>23,667</td>
<td>20,000</td>
<td>3,667</td>
<td>1,879</td>
<td>800,000</td>
</tr>
<tr>
<td>5 0</td>
<td>*11,879</td>
<td>10,000</td>
<td>1,879</td>
<td>0</td>
<td>$1,000,000</td>
</tr>
<tr>
<td></td>
<td><strong>$176,247</strong></td>
<td></td>
<td><strong>$150,000</strong></td>
<td></td>
<td><strong>$26,247</strong></td>
</tr>
</tbody>
</table>

*Rounding differences ignored.

**Note:** Computations for years 3, 4, and 5 are not part of requirement but are included in answer so that complete schedule can be presented.

**Part b.**

1. **Entry**
   - **Debit**
     - Cash $11,000,000
     - Bonds payable $10,000,000
     - Premium on bonds payable 1,000,000
   - **Credit**
     - Cash $11,000,000

To record issuance of $10,000,000 of 4% convertible debentures for $11,000,000. The bonds mature in ten years, and each $1,000 bond is convertible into five shares of $30 par value common stock.

2. **Entry**
   - **Debit**
     - Bonds payable $4,000,000
     - Premium on bonds payable (Schedule 1) 320,000
   - **Credit**
     - Common stock, $10 par (Schedule 2) $600,000
     - Additional paid-in capital 3,720,000

To record conversion of 40% of the outstanding 4% convertible debentures after giving effect to the 3-for-1 stock split.

**Schedule 1**

**Computation of Unamortized Premium on Bonds Converted**

- Premium on bonds payable on Jan. 1, 1991 $1,000,000
- Amortization for 1991 ($1,000,000 ÷ 10) $100,000
- Amortization for 1992 ($1,000,000 ÷ 10) 100,000
- Premium on bonds payable on Jan. 1, 1993 $800,000
- Bonds converted 40% $320,000

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Schedule 2

Computation of Common Stock Resulting from Conversion

Number of shares convertible on January 1, 1993:
- Number of bonds ($10,000,000 ÷ $1,000) 10,000
- Number of shares for each bond 5
- Total shares 50,000

Stock split on January 1, 1992 3
- Total shares after split 150,000

Bonds converted 40%
- Number of shares converted 60,000
- Par value $10
- Total par value $600,000

Part c.

<table>
<thead>
<tr>
<th>Entry 7/1/91</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$2,000,000</td>
<td></td>
</tr>
<tr>
<td>Discount on bonds payable</td>
<td>100,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Bonds payable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional paid in capital (stock purchase warrants)</td>
<td>100,000</td>
<td></td>
</tr>
</tbody>
</table>

To record issuance of $2,000,000 of 7% bonds with detachable warrants. The bonds mature in ten years, and each detachable warrant gives the bondholder the right to purchase for $30, one share of $1 par value common stock.

NUMBER 4

a. The purpose of the effective interest method is to provide periodic interest expense based on a constant rate over the life of the bonds. The impact of applying the effective interest method on Corval’s bond premium is to decrease the premium by a lesser amount in 1995 compared to using the straight-line method of amortization.

b. Under the straight-line interest method, the premium is amortized at a constant periodic amount, and in 1995 the premium amortization would have been greater than amortization under the effective interest method. Consequently, for 1995, interest expense would have been understated, net income would have been overstated, and the carrying amount of the bonds would have been understated.

c. The November 30, 1998, transaction is reported as an ordinary loss after income from continuing operations. This loss equals the excess of the fair value of the cash and property transferred over the bonds’ carrying amount on November 30, 1998.

d. The gross amount of the ordinary loss is added to net income under cash flows from operating activities. The cash payment is reported as a cash outflow from financing activities. Corval should disclose details of the noncash elements of the transaction either on the same page as the statement of cash flows or in the notes to the financial statements.
NUMBER 5

Part a.

Hopewell Company

COMPUTATION OF TOTAL AMOUNT RECEIVED FROM SALE OF BONDS

January 1, 1999

Present value of the future principal ($1,000,000 × 0.3855)  $385,500
Present value of future annual interest payments
($80,000 [$1,000,000 × 8%] × 6.1446)  491,568
Amount received from sale of bonds  $877,068

Part b.

Junction Company

JOURNAL ENTRY

September 1, 1999

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$4,210,000</td>
</tr>
<tr>
<td>Bond issue costs deferred</td>
<td>40,000</td>
</tr>
<tr>
<td>Bonds payable (4,000 × $1,000)</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>Premium on bonds payable (Schedule 1)</td>
<td>136,000</td>
</tr>
<tr>
<td>Detachable stock warrants (Schedule 1)</td>
<td>24,000</td>
</tr>
<tr>
<td>Bond interest expense (Schedule 2)</td>
<td>90,000</td>
</tr>
</tbody>
</table>

To record the issuance of the bonds.

Schedule 1

Premium on Bonds Payable and Value of Stock Warrants

Sales price (4,000 × $1,040)  $4,160,000
Face value of bonds  4,000,000
Deduct value assigned to stock warrants
(4,000 × 2 = 8,000 warrants × $3)  24,000
Premium on bonds payable  $136,000

Schedule 2

Accrued Bond Interest to Date of Sale

Face value of bonds  $4,000,000
Interest rate  9%
Annual interest  $360,000
Accrued interest (3 months)—(360,000 × 3/12)  $90,000
Part c.

Cone Company

COMPUTATION OF GAIN ON EARLY EXTINGUISHMENT OF DEBT

July 1, 1999

- Book value of bonds on December 1, 1996: $2,200,000
- Book value of bonds on December 31, 1998: $2,100,000
- Amortization for 25 months: $100,000
  - Monthly amortization ($100,000 ÷ 25): $4,000
- Book value of bonds on December 31, 1998: $2,100,000
- Amortization for 1996 to July 1, 1999: ($4,000 × 6 months) = $24,000
- Book value of bonds on July 1, 1999: $2,076,000
- Cost of reacquisition (2,000 × $980): $1,960,000
- Gain on early extinguishment of debt: $116,000

NUMBER 6

Warner, Inc.

INCOME BEFORE INCOME TAXES FROM BOND INVESTMENT

For the Years Ended December 31, 1998 and 1999

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest income before amortization (Schedules 1 and 2)</td>
<td>$37,333</td>
<td>$53,334</td>
</tr>
<tr>
<td>Amortization of bond discount (Schedule 3)</td>
<td>5,775</td>
<td>8,817</td>
</tr>
<tr>
<td>Gain on sale of bonds (Schedule 4)</td>
<td>—</td>
<td>5,441</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>$43,108</td>
<td>$67,592</td>
</tr>
</tbody>
</table>

Schedule 1

Interest Income Before Amortization for 1998

- Face value of bonds (800 × $1,000): $800,000
- Interest rate × 8%
- Interest for year: $64,000
- Interest received December 1, 1998 ($64,000 × 1/2): $32,000
- Interest accrued at December 31, 1998 ($64,000 × 1/12): 5,333
- Interest income before amortization for 1998: $37,333

Schedule 2

Interest Income Before Amortization for 1999

- Interest accrued at December 31, 1998, reversed: ($5,333)
- Interest received June 1, 1998 (6 months): 32,000
- Accrued interest paid by buyer (June 1 to November 1, 5/12 × $64,000): 26,667
- Interest income before amortization for 1999: $53,334
Schedule 3

Amortization of Bond Discount—Effective Interest Method for 1998 and 1999

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face value of bonds (800 × $1,000)</td>
<td>$800,000</td>
</tr>
<tr>
<td>Purchase price of bonds</td>
<td>738,300</td>
</tr>
<tr>
<td>Bond discount</td>
<td>61,700</td>
</tr>
<tr>
<td>Amortization of bond discount for 1998</td>
<td></td>
</tr>
<tr>
<td>6 months ended December 1, 1998</td>
<td>$4,915</td>
</tr>
<tr>
<td>($738,300 × 5% = $36,915 effective interest – $32,000 cash interest)</td>
<td></td>
</tr>
<tr>
<td>Month of December 1998</td>
<td></td>
</tr>
<tr>
<td>($743,215 ($738,300 + $4,915) × 5% = $37,161 effective interest = $32,000</td>
<td>860</td>
</tr>
<tr>
<td>cash interest = $5,161 × 1/6)</td>
<td>5,775</td>
</tr>
<tr>
<td>Balance of unamortized bond discount, December 31, 1998</td>
<td>55,925</td>
</tr>
<tr>
<td>Amortization of bond discount for 1999</td>
<td></td>
</tr>
<tr>
<td>5 months ended June 1, 1992 ($5,161 – $860)</td>
<td>4,301</td>
</tr>
<tr>
<td>5 months ended November 1, 1999</td>
<td></td>
</tr>
<tr>
<td>($748,376 [$743,215 + $5,161] × 5% = $37,419 effective interest - $32,000</td>
<td>4,516</td>
</tr>
<tr>
<td>cash interest = $5,419 × 5/6)</td>
<td>8,817</td>
</tr>
<tr>
<td>Balance of unamortized bond discount, November 1, 1999</td>
<td>$47,108</td>
</tr>
</tbody>
</table>

Schedule 4

Gain on Sale of Bonds for 1999

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling price of bonds</td>
<td></td>
</tr>
<tr>
<td>Selling price of bonds, including accrued interest paid by buyer</td>
<td>$785,000</td>
</tr>
<tr>
<td>Accrued interest paid by buyer (Schedule 2)</td>
<td>(26,667)</td>
</tr>
<tr>
<td>Selling price of bonds</td>
<td>$758,333</td>
</tr>
<tr>
<td>Book value of bonds</td>
<td></td>
</tr>
<tr>
<td>Purchase price of bonds</td>
<td>738,300</td>
</tr>
<tr>
<td>Amortization of bond discount for 1998 (Schedule 3)</td>
<td>5,775</td>
</tr>
<tr>
<td>Amortization of bond discount for 1999 (Schedule 3)</td>
<td>8,817</td>
</tr>
<tr>
<td>Book value of bonds at date of sale</td>
<td>752,892</td>
</tr>
<tr>
<td>Gain on sale of bonds</td>
<td>$ 5,441</td>
</tr>
</tbody>
</table>
Warner, Inc.

SCHEDULE OF INTEREST INCOME AND BOND DISCOUNT AMORTIZATION —
EFFECTIVE INTEREST METHOD (8% Bonds Purchased to Yield 10%)
(Not Required)

<table>
<thead>
<tr>
<th>Date</th>
<th>Cash Effective interest (4% semiannual)</th>
<th>Effective interest (5% semiannual)</th>
<th>Discount amortization</th>
<th>Balance unamortized discount</th>
<th>Carrying value of bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-1-98</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>$61,700</td>
<td>$738,300</td>
</tr>
<tr>
<td>12-1-98</td>
<td>$32,000</td>
<td>$36,915</td>
<td>$4,915</td>
<td>56,785</td>
<td>743,215</td>
</tr>
<tr>
<td>6-1-99</td>
<td>32,000</td>
<td>37,161</td>
<td>5,161</td>
<td>51,624</td>
<td>748,376</td>
</tr>
<tr>
<td>12-1-99</td>
<td>32,000</td>
<td>37,419</td>
<td>5,419</td>
<td>46,205</td>
<td>753,795</td>
</tr>
<tr>
<td>6-1-00</td>
<td>32,000</td>
<td>37,690</td>
<td>5,690</td>
<td>40,515</td>
<td>759,485</td>
</tr>
<tr>
<td>12-1-00</td>
<td>32,000</td>
<td>37,974</td>
<td>5,974</td>
<td>34,541</td>
<td>765,459</td>
</tr>
<tr>
<td>6-1-01</td>
<td>32,000</td>
<td>38,273</td>
<td>6,273</td>
<td>28,268</td>
<td>771,732</td>
</tr>
<tr>
<td>12-1-01</td>
<td>32,000</td>
<td>38,587</td>
<td>6,587</td>
<td>21,681</td>
<td>778,319</td>
</tr>
<tr>
<td>6-1-02</td>
<td>32,000</td>
<td>38,916</td>
<td>6,916</td>
<td>14,765</td>
<td>785,235</td>
</tr>
<tr>
<td>12-1-02</td>
<td>32,000</td>
<td>39,262</td>
<td>7,262</td>
<td>7,503</td>
<td>792,497</td>
</tr>
<tr>
<td>6-1-03</td>
<td>32,000</td>
<td>39,625</td>
<td>7,625</td>
<td>(122)</td>
<td>800,122</td>
</tr>
<tr>
<td>6-1-03</td>
<td>—</td>
<td>(122)c</td>
<td>(122)c</td>
<td>122c</td>
<td>800,000</td>
</tr>
<tr>
<td></td>
<td>$320,000</td>
<td>$381,700</td>
<td>$61,700</td>
<td>0</td>
<td>$800,000</td>
</tr>
</tbody>
</table>

a Price paid for $800,000 bonds equals present value of principal plus present value of interest payments:
Principal – $800,000 × .614 (present value of $1 at 5% for 10 periods) $491,200
Interest payments - $32,000 (4% × $800,000) × 7.722 (present value of an annuity of $1 at 5% for 10 periods) 247,100
$738,300

b $800,000 – $738,300 = $61,700.

c Adjustment for fractional differences.

NUMBER 7

a. 1. The 9% bonds were issued at a discount (less than face amount). Although the bonds provide for payment of interest of 9% of face amount, this rate was less than the prevailing or market rate for bonds of similar quality at the time the bonds were issued. Thus, the issue price of the bonds, which is the present value of the principal and interest payments discounted at 10%, is less than the face amount.

2. The amount of interest expense would be higher in the second year of the life of the bond issue than in the first year of the life of the bond issue. According to the effective interest method of amortization, the 10% effective interest rate is applied to the bond carrying amount. In a discount situation, the bond carrying amount increases each year, and this results in a greater interest expense in each successive year.

b. 1. Gain or loss on early extinguishment of debt should be determined by comparing the carrying amount of the bonds at the date of extinguishment with the acquisition price. If the carrying amount exceeds the acquisition price, a gain results. If the carrying amount is less than the acquisition price, a loss results.

In this case, a loss results. The term bonds were issued at a discount. Therefore, the carrying amount of the bonds at the date of extinguishment must be less than the face amount, which is less than the acquisition price.

2. Drew should report the loss from early extinguishment of debt in its 1996 income statement as an ordinary item.

c. The proceeds from the issuance of the 7% nonconvertible bonds with detachable stock purchase warrants should be recorded as an increase in cash. These proceeds should be allocated between the bonds and the warrants on the basis of their relative market values. The portion of the proceeds allocable to the bonds should be accounted for as long-term debt, while the portion allocable to the warrants should be accounted for as paid-in capital.
a. Villa Co.
BALANCE SHEET – LIABILITIES SECTION
December 31, 1997

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>$35,000</td>
</tr>
<tr>
<td>Accrued interest payable</td>
<td>$20,000</td>
</tr>
<tr>
<td>Income taxes payable</td>
<td>$180,000</td>
</tr>
<tr>
<td>Dividends payable</td>
<td>$50,000</td>
</tr>
<tr>
<td>Current portion, long-term debt</td>
<td>$62,000</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>$347,000</td>
</tr>
<tr>
<td>Capital lease payable, minus $62,000</td>
<td>$318,000</td>
</tr>
<tr>
<td>current portion</td>
<td></td>
</tr>
<tr>
<td>Bonds payable</td>
<td>$442,000</td>
</tr>
<tr>
<td>Deferred tax liability</td>
<td>$90,000</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>$1,197,000</td>
</tr>
</tbody>
</table>

[1] $100,000 x 4.8 = $480,000
$480,000 - $100,000 = $380,000
$380,000 x 10% = $38,000
$100,000 - $38,000 = $62,000
$380,000 - $62,000 = $318,000

[2] 500K x 8% x ½ = 20K
440K x 10% x ½ = 22K
440K + (22K - 20K) = 442,000

[3] 600K x 30% = 180K
300K x 30% = 90K

b. Villa should disclose the following information about the capital leases, either in the body of the financial statements or in the notes thereto:

- The gross amount of assets recorded under the capital leases, presented by major classes. This information may be combined with owned assets.
- Future minimum lease payments as of the balance sheet date, in the aggregate and for each of the 5 succeeding years.
- A general description of the leasing arrangement, including the existence and terms of renewal, escalation clauses, and restrictions imposed by the lease agreements.

Villa should disclose the following information about the bonds payable, either in the body of the financial statements or in the notes thereto:

- The face amount.
- The nature and terms of the bonds and a discussion of their credit and market risk, cash requirements, and related accounting policies.
• The fair value of the bonds and the method used to estimate their fair value. The price at which the bonds are trading is the most reasonable estimate of their fair value at December 31, 1997.

c. Villa should account for each contingency in a slightly different way because the likelihood of Villa's incurring a loss differs in each situation.

For the toxic waste cleanup, a loss has been incurred. In the notes to its financial statements, Villa should disclose the nature of the loss on cleanup and indicate that an estimate of the loss, or range of the loss, cannot be made. No accrual should be made because the loss cannot be reasonably estimated and accrual of an uncertain amount would impair the integrity of the financial statements.

With regard to Clear's claim, it is only reasonably possible, and not probable, that Villa will have to pay. Accordingly, Villa should not accrue the loss. Villa should disclose the existence and nature of Clear's claim in the notes to its financial statements. Disclosure should include an estimate of the potential range of loss.

Regarding the lack of rockslide insurance, no asset has been impaired and no liability has been incurred. Accordingly, Villa should not accrue a loss. Given that the likelihood of a rockslide is remote, disclosure of the uninsured risk, while permitted, is not required.

**NUMBER 9**

a. Cope should report the probable warranty costs as an expense in the income statement and a liability in the balance sheet because both of the following required conditions for accrual were met:

• It is considered probable that liabilities have been incurred.
• The amount of loss can be reasonably estimated.

In addition, it may be necessary for Cope to disclose the nature of the probable warranty costs in the notes to the financial statements.

b. Cope should disclose the nature of the threat of expropriation of assets in the notes to the financial statements. In addition, an estimate of the possible loss or range of loss should be disclosed in the notes to the financial statements.

Cope should not report the threat of expropriation of assets as an expense in the income statement nor as a liability in the balance sheet because it does not meet both required conditions for accrual. The actual expropriation of assets is only reasonably possible instead of probable.

c. Adequate disclosure should be made of contingencies that result in gains, but care should be exercised to avoid misleading implications as to the likelihood of realization.

Cope should not report this year the probable damages that may be received next year as a gain in the income statement nor as an asset in the balance sheet. Gain contingencies usually are not recorded in the accounts until the gains are realized.
NUMBER 10

a. A financial instrument is cash, evidence of an ownership interest in an entity, or a contractual right to receive or deliver cash or another financial instrument. A derivative financial instrument is a product whose value is derived, at least in part, from the value and characteristics of one or more underlying assets. Examples of derivative financial instruments include: futures; forward, swap, or options contracts; interest-rate caps; and fixed-rate loan commitments.

b. Market risk is the possibility that future changes in market prices may make a financial instrument less valuable or more burdensome. Credit risk is the possibility that a loss may occur from the failure of the other party to perform according to the terms of a contract. Concentrations of credit risk exist when receivables have common characteristics that may affect their collection. One common characteristic might be that the receivables are due from companies in the same industry or in the same region of the country.

c. The fair value of a financial instrument is the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. Quoted market price, if available, is the best evidence of the fair value of a financial instrument. If quoted prices are not available, Chatham’s management’s best estimate of fair value might be based on valuation techniques or on the quoted market price of a financial instrument with similar characteristics.

NUMBER 11

1. E
2. J
3. H
4. N
5. M
6. F
7. O
8. F
9. S
10. O
11. O

Solution:

Author's Note: This problem is similar to a problem on the November 1995 exam. The difference is that the November exam required the calculation of the dollar amounts for the solution. To assist the candidates in preparation for future exams, our approach will first calculate the amounts as required by the November 1995 exam and then answer the procedural questions from the November 1998 exam.
SOLUTIONS APPROACH:

The key to the problem is to change the format for the amortization table to make the calculations easier. The suggested format and the numbers given are listed below:

<table>
<thead>
<tr>
<th>DATE</th>
<th>FACE AMOUNT</th>
<th>+ BOND PREMIUM</th>
<th>= CARRYING VALUE</th>
<th>FACE INTEREST PAID</th>
<th>EFFECTIVE INTEREST EXPENSE</th>
<th>= AMORTZ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/1/97</td>
<td></td>
<td></td>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest &amp; Amtz.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/31/97</td>
<td>(4)</td>
<td>$349,100</td>
<td>(2)</td>
<td>$14,100</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest &amp; Amtz.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/30/98</td>
<td></td>
<td></td>
<td>(6)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. The problem states that the face amount of the bonds issued is $250,000. Place $250,000 in the face amount column for July 1.

2. The interest paid is the same each 6 months so $17,500 should be added to the face interest paid column for 1997 (answer 2). The interest paid divided by the face amount of the bonds ($17,500 / $250,000) equals a semi-annual interest rate of 7% or an annual rate of 14%. This calculation was required for the November 1995 exam problem.

3. For 1997 the $17,500 paid for interest minus the $14,100 interest expense (given) should equal the amortization of the bond premium of $3,400. (Answer 3). Also place the $3,400 amortization under the bond premium column and the carrying value column.

4. The December 31, 1997 carrying value of $349,100 (given) plus the $3,400 amortization would equal the July 1 carrying value of $352,500 (Answer 1).

5. The July 1 carrying value of $352,500 minus the face value of the bonds ($250,000) is the balance in the bond premium at July 1 of $102,500.

6. The July total of the bond premium, $102,500 minus the $3,400 amortization equals the balance in the bond premium column at 12/31/97 of $99,100 (Answer 4).

7. The July 1 carrying value times the effective interest rate is the interest expense for the first 6 months. So the $14,100 interest expense divided by the July 1 carrying value of $352,500 is an effective rate of 4% each six months and an annual rate of 8%. This calculation was required for the November 1995 exam problem (Answer 7).

8. The interest paid and the bond amortization for the second 6 months is given. The difference is the bond interest expense. ($17,500 - $3,536 = $13,964 interest expense) (Answer 5).

9. Place the amortization for the second 6 months ($3,536) as a subtraction in the bond premium column and the carrying value column and foot the columns. The balance in the face amount column is $250,000 and the bond premium is $95,564 for a total carrying value of $345,564 (Answer 6).

9S-27
<table>
<thead>
<tr>
<th>DATE</th>
<th>FACE AMOUNT</th>
<th>BOND PREMIUM</th>
<th>CARRYING VALUE</th>
<th>FACE INTEREST PAID</th>
<th>EFFECTIVE INTEREST EXPENSE</th>
<th>AMORTZ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/1/97</td>
<td>$250,000</td>
<td>+ $102,500</td>
<td>= $352,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interest &amp; Amtz.</td>
<td>($3,400)</td>
<td>($3,400)</td>
<td>$17,500 - $14,100 = $3,400</td>
<td></td>
</tr>
<tr>
<td>12/31/97</td>
<td>$250,000</td>
<td>+ $99,100</td>
<td>= $349,100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interest &amp; Amtz.</td>
<td>($3,536)</td>
<td>($3,536)</td>
<td>$17,500 - $13,964 = $3,536</td>
<td></td>
</tr>
<tr>
<td>6/30/98</td>
<td>$250,000</td>
<td>+ $95,564</td>
<td>= $345,564</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROCEDURAL ANSWERS FOR NOVEMBER 1998 EXAM:**

1. Answer **E**
   Carrying amount 7/1/97 (just theory).

2. Answer **J**
   Cash paid for interest each 6 months is ($250,000 x 14% x ½ = $17,500).

3. Answer **H**
   Bond premium amortization for the first 6 months is the cash paid for interest minus the interest expense. ($17,500 - $14,100 = $3,400).

4. Answer **N**
   Unamortized bond premium is the carrying amount of the bonds minus the face amount of the bonds ($349,100 - $250,000) = $99,100).

5. Answer **M**
   Interest expense for the second 6 months is the carrying value times the effective interest rate times ½ year ($349,100 x 8% x ½ = $13,964).

6. Answer **F**
   The carrying amount at 6/30/98 is the 12/31/97 carrying value minus the amortization for the second 6 months ($349,100 - $3,536 = $345,564).

7. Answer **O**
   The effective annual interest rate is the interest expense divided by the carrying amount at the beginning of the period times two ($14,100 / $352,500 is an effective rate of 4% times 2 equals an annual rate of 8%).

8. Answer **F**
   Proceeds received from the sale of bonds is a financing activity.

9. Answer **S**
   Interest paid is not a part of the cash flow statement using the indirect method. However, the interest is disclosed in a supplemental schedule.

10. Answer **O**
    Amortization of bond premium does not affect cash and is shown as a deduction from net income in calculating cash generated from operations (operating activities).

11. Answer **O**
    Gain on early extinguishment of debt does not affect cash and is shown as a deduction from net income in calculating cash generated from operations (operating activities).
Chapter 9 Simulation Exercise

This problem consists of Sections A and B

Section A contains 7 items. Select the best answer for each item.

A:

On July 1, 1997, Ring Co. issued $250,000, 14% bonds payable at a premium. The bonds are due in ten years. Interest is payable semiannually every June 30 and December 31. On December 31, 1997, and June 30, 1998, Ring made the semi-annual interest payments due and recorded interest expense and amortization of bond premium.

With the proceeds of the bond issuance, Ring retired other debt. Ring recorded a gain on the early extinguishment of the other debt.

Required:

Items 1 through 7, contained in the partially-completed amortization table, shown under the Resource tab, represent formulas used to calculate information needed to complete the table. Select your answers from the following list of formulas. Each formula may be selected once, more than once, or not at all. "Stated interest rate" and "effective interest rate" are stated on an annual basis.

<table>
<thead>
<tr>
<th>Date</th>
<th>Cash paid</th>
<th>Interest expense</th>
<th>Amortization</th>
<th>Carrying amount</th>
<th>Unamortized premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/1/97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>12/31/97</td>
<td>(2)</td>
<td>$14,100</td>
<td>(3)</td>
<td>$349,100</td>
<td>(4)</td>
</tr>
<tr>
<td>6/30/98</td>
<td>$17,500</td>
<td>(5)</td>
<td>$3,536</td>
<td>(6)</td>
<td></td>
</tr>
</tbody>
</table>

Effective Annual Interest Rate: (7)

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Face amount x stated interest rate.</td>
<td>J</td>
<td>(Face amount x stated interest rate) x ½.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Face amount x effective interest rate.</td>
<td>K</td>
<td>(Face amount x effective interest rate) x ½.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Carrying amount x stated interest rate.</td>
<td>L</td>
<td>(Carrying amount at the beginning of the period x stated interest rate) x ½.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Carrying amount x effective interest rate.</td>
<td>M</td>
<td>(Carrying amount at the beginning of the period x effective interest rate) x ½.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Present value of face amount + present value of all future interest payments at date of issuance.</td>
<td>N</td>
<td>Carrying amount – face amount.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Carrying amount of bonds in the previous period – amortization for the current period.</td>
<td>O</td>
<td>(Interest expense/carrying amount at the beginning of the period) x 2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>Carrying amount of bonds in the previous period + amortization for the current period.</td>
<td>P</td>
<td>(Cash paid/carrying amount) x 2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Cash paid – interest expense.</td>
<td>Q</td>
<td>Face amount – unamortized premium.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Cash paid + interest expense.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B:

On June 30, 1995, Corval Co. issued 15-year 12% bonds at a premium (effective yield 10%). On November 30, 1998, Corval transferred both cash and property to the bondholders to extinguish the entire debt. The fair value of the transferred property equaled its carrying amount. The fair value of the cash and property transferred exceeded the bonds carrying amount. [Ignore income taxes.]

Required:

a. Explain the purpose of the effective interest method and the effect of applying the method in 1995 on Corval’s bond premium.

b. What would have been the effect on 1995 interest expense, net income, and the carrying amount of the bonds if Corval had incorrectly adopted the straight-line method instead of the effective interest method?
Chapter 9 Simulation Solution

A:

1. E
2. J
3. H
4. N
5. M
6. F
7. O

**Author’s Note:** This problem is similar to a problem on a prior exam. The difference is that the prior exam required the calculation of the dollar amounts for the solution. To assist the candidates in preparation for future exams, our approach will first calculate the dollar amounts as required and then answer the procedural questions.

**SOLUTIONS APPROACH:**

The key to the problem is to change the format for the amortization table to make the calculations easier. The suggested format and the numbers given are listed below:

<table>
<thead>
<tr>
<th>DATE</th>
<th>FACE AMOUNT</th>
<th>BOND PREMIUM</th>
<th>CARRYING VALUE</th>
<th>FACE INTEREST PAID</th>
<th>EFFECTIVE INTEREST EXPENSE</th>
<th>AMORTZ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/1/97</td>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest &amp; Amtz.</td>
<td>14,100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/31/97</td>
<td>(4)</td>
<td></td>
<td>$349,100</td>
<td>$17,500</td>
<td>$3,536</td>
<td></td>
</tr>
<tr>
<td>Interest &amp; Amtz.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/30/98</td>
<td>(6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. The problem states that the face amount of the bonds issued is $250,000. Place $250,000 in the face amount column for July 1.
2. The interest paid is the same each 6 months so $17,500 should be added to the face interest paid column for 1997 (answer 2). The interest paid divided by the face amount of the bonds ($17,500 / $250,000) equals a semi-annual interest rate of 7% or an annual rate of 14%. This calculation was required for the November 1995 exam problem.
3. For 1997 the $17,500 paid for interest minus the $14,100 interest expense (given) should equal the amortization of the bond premium of $3,400. (Answer 3). Also place the $3,400 amortization under the bond premium column and the carrying value column.
4. The December 31, 1997 carrying value of $349,100 (given) plus the $3,400 amortization would equal the July 1 carrying value of $352,500 (Answer 1).
5. The July 1 carrying value of $352,500 minus the face value of the bonds ($250,000) is the balance in the bond premium at July 1 of $102,500.
6. The July total of the bond premium, $102,500 minus the $3,400 amortization equals the balance in the bond premium column at 12/31/97 of $99,100 (Answer 4).
7. The July 1 carrying value times the effective interest rate is the interest expense for the first 6 months. So the $14,100 interest expense divided by the July 1 carrying value of $352,500 is an effective rate of 4% each six months and an annual rate of 8%. This calculation was required for the November 1995 exam problem (Answer 7).

8. The interest paid and the bond amortization for the second 6 months is given. The difference is the bond interest expense. ($17,500 - $3,536 = $13,964 interest expense) (Answer 5).

9. Place the amortization for the second 6 months ($3,536) as a subtraction in the bond premium column and the carrying value column and foot the columns. The balance in the face amount column is $250,000 and the bond premium is $95,564 for a total carrying value of $345,564 (Answer 6).

<table>
<thead>
<tr>
<th>DATE</th>
<th>FACE AMOUNT</th>
<th>BOND PREMIUM</th>
<th>CARRYING VALUE</th>
<th>FACE INTEREST PAID</th>
<th>EFFECTIVE INTEREST EXPENSE</th>
<th>AMORTZ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/1/97</td>
<td>$250,000</td>
<td>+ $102,500</td>
<td>= $352,500</td>
<td>$17,500</td>
<td>- $14,100</td>
<td>= $3,400</td>
</tr>
<tr>
<td>Interest &amp; Amtz.</td>
<td>($3,400)</td>
<td>($3,400)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/31/97</td>
<td>$250,000</td>
<td>+ $99,100</td>
<td>= $349,100</td>
<td>$17,500</td>
<td>- $13,964</td>
<td>= $3,536</td>
</tr>
<tr>
<td>Interest &amp; Amtz.</td>
<td>($3,536)</td>
<td>($3,536)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/30/98</td>
<td>$250,000</td>
<td>+ $95,564</td>
<td>= $345,564</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROCEDURAL ANSWERS:**

1. Answer **E**
   Carrying amount 7/1/97 (just theory).

2. Answer **J**
   Cash paid for interest each 6 months is ($250,000 x 14% x ½ = $17,500).

3. Answer **H**
   Bond premium amortization for the first 6 months is the cash paid for interest minus the interest expense. ($17,500 - $14,100 = $3,400).

4. Answer **N**
   Unamortized bond premium is the carrying amount of the bonds minus the face amount of the bonds ($349,100 - $250,000) = $99,100)

5. Answer **M**
   Interest expense for the second 6 months is the carrying value times the effective interest rate times ½ year ($349,100 x 8% x ½ = $13,964).

6. Answer **F**
   The carrying amount at 6/30/98 is the 12/31/97 carrying value minus the amortization for the second 6 months ($349,100 - $3,536 = $345,564).

7. Answer **O**
   The effective annual interest rate is the interest expense divided by the carrying amount at the beginning of the period times two ($14,100 / $352,500 is an effective rate of 4% times 2 equals an annual rate of 8%).

**B:**

a. The purpose of the effective interest method is to provide periodic interest expense based on a constant rate over the life of the bonds. The impact of applying the effective interest method on Corval’s bond premium is to decrease the premium by a lesser amount in 1995 compared to using the straight-line method of amortization.

b. Under the straight-line interest method, the premium is amortized at a constant periodic amount, and in 1995 the premium amortization would have been greater than amortization under the effective interest method. Consequently, for 1995, interest expense would have been understated, net income would have been overstated, and the carrying amount of the bonds would have been understated.

(See amortization tables on page 9-3 in the textbook.)
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Revenue and Expense Recognition, Miscellaneous Items: Accounting Standards Codification

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Percentage-of-Completion Method
Costs and Estimated Earnings in Excess of Billings
Completed-Contract Method
Treatment of Losses on Contracts in Progress
Illustrative Problems

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Matching Costs and Revenue
When Installment Accounting Is Acceptable
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Interest
Balance Sheet Presentation

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Chapter Ten includes ASC 250, ASC 605, ASC 718, ASC 740, and ASC 815

CONTRACT ACCOUNTING

Methods of Income Measurement

1. **Percentage of Completion**: Income is recognized as work on a contract progresses based on a percentage of estimated total income, either as:
   a. a percentage of incurred costs to date to estimated total costs, or
   b. any other measure of progress toward completion that may be appropriate having due regard for work performed.

2. **Completed Contract**: Profit is measured when contract is complete. Results in deferral of profit until year contract is substantially finished. This method does not measure current performance and may result in erratic reporting of income. When the completed-contract method is used, general and administrative costs are usually treated as period costs; however, it may be appropriate to allocate such costs to contracts in progress. In any case, there should not be excessive deferral of overhead costs, which might occur if total overhead is assigned to abnormally few or small contracts in progress.

Percentage-of-Completion Method

The completed-contract method does not present a significant income measurement problem. Costs are accumulated and deferred until the contract is substantially complete at which time contract costs are matched with the income generated.

The percentage-of-completion method, however, presents some accounting problems which can easily cause confusion. Ordinarily, the act of billing, a debit to accounts receivable, results in a credit to a revenue account. In percentage of completion, revenue does not coincide with the act of billing, since the contract may provide for billings to be made either ahead of or after various stages of completion. Further, revenue earned is determined periodically, not necessarily at the time billings are permitted under the provisions of the contract.

Costs and Estimated Earnings in Excess of Billings

"Billings in excess of costs and estimated earnings" is offset against "Costs and estimated earnings in excess of billings" when the same contract is involved in both accounts. Where different contracts are involved, their status with regard to this account should not be netted. ASC 605 states, "...current assets may include costs and recognized income not yet billed with respect to certain contracts; and liabilities (in most cases current liabilities) may include billings in excess of costs and recognized income with respect to other contracts."

Other titles found in current accounting literature were:
- Construction in Progress
- Unbilled Construction in Progress—At Contract Price
- Billings on Construction in Process
- Partial Billings on Contract

Contract Accounting problems in past CPA exams have followed ASC 605.

Completed-Contract Method

Contact Costs are recorded:
- Contract Costs
- Cash, A/P, etc.
Progress Billings are made:

Accounts Receivable—Contracts
  Progress Billings

Contract is completed and the full contract price has been billed:

Progress billings
  Contract Costs
  Income on Long-Term Contracts

The balance sheet would show as a current asset the following, prior to completion of the contract, assuming costs of $125,000 and billings of $65,000.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Costs to date</td>
<td>$125,000</td>
</tr>
<tr>
<td>Less: Progress billings</td>
<td>65,000</td>
</tr>
<tr>
<td>Costs on uncompleted contracts</td>
<td></td>
</tr>
<tr>
<td>in excess of billings</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

If progress billings exceed costs, show the balance as a current liability, "Billings on uncompleted contracts in excess of costs." ASC 605 states, "When the completed-contract method is used, an excess of accumulated costs over related billings should be shown in the balance sheet as a current asset, and an excess of accumulated billings over related costs shown among the liabilities, in most cases as a current liability."

"If costs exceed billings on some contracts, and billings exceed costs on others, the contracts should ordinarily be segregated so that the figures on the asset side include only those contracts on which costs exceed billings, those on the liability side include only those on which billings exceed costs."

**Treatment of Losses on Contracts in Progress**

Losses should be provided for in full when it is apparent that the contract will result in a loss. This applies to both methods.

Journal Entry:

- Loss on Contract
- Allowance for Contract Loss

ASC 605 states: "When the current estimate of total contract costs indicates a loss, in most circumstances provision should be made for the loss on the entire contract."

**Illustrative Problem #1**

**Facts:**
- Total contract price: $9,000,000
- Estimated costs: $8,000,000
- 3-year contract

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Costs</th>
<th>Estimated Additional Costs</th>
<th>Billings</th>
<th>Collections</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$1,944,000</td>
<td>$6,156,000</td>
<td>$1,800,000</td>
<td>$1,620,000</td>
</tr>
<tr>
<td>2</td>
<td>5,232,000</td>
<td>2,024,000</td>
<td>4,950,000</td>
<td>4,455,000</td>
</tr>
<tr>
<td>3</td>
<td>1,844,000</td>
<td>—</td>
<td>2,250,000</td>
<td>2,925,000</td>
</tr>
</tbody>
</table>

**Required:**

Prepare journal entries for the above contract assuming:

1. Percentage of completion
2. Completed contract

The contract calls for the customer to retain 10% of contract billings until the last payment is submitted.
Solution:

(1) **Percentage of Completion:**

<table>
<thead>
<tr>
<th></th>
<th>Year #1</th>
<th>Year #2</th>
<th>Year #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of contract work</td>
<td>$1,944,000</td>
<td>$5,232,000</td>
<td>$1,844,000</td>
</tr>
<tr>
<td>Materials, Cash, etc.</td>
<td>$1,944,000</td>
<td>$5,232,000</td>
<td>$1,844,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>1,800,000</td>
<td>4,950,000</td>
<td>2,250,000</td>
</tr>
<tr>
<td>Billings in excess of cost and estimated earnings</td>
<td>1,800,000</td>
<td>4,950,000</td>
<td>2,250,000</td>
</tr>
<tr>
<td>Cash</td>
<td>1,620,000</td>
<td>4,455,000</td>
<td>2,925,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>1,620,000</td>
<td>4,455,000</td>
<td>2,925,000</td>
</tr>
<tr>
<td>Cost and estimated earnings in excess of billings</td>
<td>2,160,000</td>
<td>4,860,000</td>
<td>1,980,000</td>
</tr>
<tr>
<td>Revenue from contracts</td>
<td>2,160,000</td>
<td>4,860,000</td>
<td>1,980,000</td>
</tr>
<tr>
<td>Loss on contract</td>
<td>44,000</td>
<td>44,000</td>
<td>44,000</td>
</tr>
<tr>
<td>Allowance for contract loss</td>
<td>44,000</td>
<td>44,000</td>
<td>44,000</td>
</tr>
</tbody>
</table>

**Closing Entries:**

<table>
<thead>
<tr>
<th></th>
<th>Year #1</th>
<th>Year #2</th>
<th>Year #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue from contracts</td>
<td>2,160,000</td>
<td>4,860,000</td>
<td>1,980,000</td>
</tr>
<tr>
<td>Allowance for contract loss</td>
<td>44,000</td>
<td>44,000</td>
<td>44,000</td>
</tr>
<tr>
<td>Cost of contract work</td>
<td>1,944,000</td>
<td>5,232,000</td>
<td>1,844,000</td>
</tr>
<tr>
<td>Loss on contract</td>
<td>44,000</td>
<td>44,000</td>
<td>44,000</td>
</tr>
<tr>
<td>Income summary</td>
<td>216,000</td>
<td>416,000</td>
<td>180,000</td>
</tr>
</tbody>
</table>

**SCHEDULES**

**Revenue to be recognized**

<table>
<thead>
<tr>
<th></th>
<th>Year #1</th>
<th>Year #2</th>
<th>Year #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs incurred to date</td>
<td>$1,944,000</td>
<td>$1,944,000+5,232,000=7,176,000</td>
<td>7,176,000+2,024,000=9,200,000</td>
</tr>
<tr>
<td>Total costs</td>
<td>1,944,000+6,156,000=8,100,000</td>
<td>7,176,000+2,024,000=9,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>% = 24%</td>
<td></td>
<td>78%</td>
<td></td>
</tr>
<tr>
<td>× 9,000,000 =</td>
<td>2,160,000</td>
<td>7,020,000</td>
<td>9,000,000</td>
</tr>
<tr>
<td>Less prior years' revenue</td>
<td>2,160,000</td>
<td>7,020,000</td>
<td>1,980,000</td>
</tr>
</tbody>
</table>
# Accumulated Profit (Loss) on contract and allowance for contract loss

<table>
<thead>
<tr>
<th></th>
<th>Year #1</th>
<th>Year #2</th>
<th>Year #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue recognized</td>
<td>$2,160,000</td>
<td>$4,860,000</td>
<td>$1,980,000</td>
</tr>
<tr>
<td>Current costs</td>
<td>1,944,000</td>
<td>5,232,000</td>
<td>1,844,000</td>
</tr>
<tr>
<td>Profit (loss)</td>
<td>216,000</td>
<td>(372,000)</td>
<td>136,000</td>
</tr>
<tr>
<td>Cumulative—Year #2</td>
<td></td>
<td>(156,000)</td>
<td></td>
</tr>
<tr>
<td>Provision for additional loss</td>
<td></td>
<td>(44,000)</td>
<td>44,000</td>
</tr>
<tr>
<td>[9,000,000 – (1,944,000 + 5,232,000 + 2,024,000)]</td>
<td>(200,000)</td>
<td>180,000</td>
<td></td>
</tr>
<tr>
<td>Cumulative—Year #3</td>
<td></td>
<td></td>
<td>(20,000)</td>
</tr>
<tr>
<td>[9,000,000 – (1,944,000 + 5,232,000 + 1,844,000)]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Completed Contract:

<table>
<thead>
<tr>
<th></th>
<th>Year #1</th>
<th>Year #2</th>
<th>Year #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction in progress</td>
<td>$1,944,000</td>
<td>$5,232,000</td>
<td>$1,844,000</td>
</tr>
<tr>
<td>Materials, cash, etc.</td>
<td>$1,944,000</td>
<td>$5,232,000</td>
<td>$1,844,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>1,800,000</td>
<td>4,950,000</td>
<td>2,250,000</td>
</tr>
<tr>
<td>Progress billings</td>
<td>1,800,000</td>
<td>4,950,000</td>
<td>2,250,000</td>
</tr>
<tr>
<td>Cash</td>
<td>1,620,000</td>
<td>4,455,000</td>
<td>2,925,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>1,620,000</td>
<td>4,455,000</td>
<td>2,925,000</td>
</tr>
<tr>
<td>Provision for contract loss</td>
<td>200,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allowance for loss</td>
<td></td>
<td></td>
<td>200,000</td>
</tr>
<tr>
<td>Contract costs</td>
<td></td>
<td></td>
<td>9,020,000</td>
</tr>
<tr>
<td>Progress billings</td>
<td></td>
<td>9,000,000</td>
<td></td>
</tr>
<tr>
<td>Construction in progress</td>
<td></td>
<td></td>
<td>9,020,000</td>
</tr>
<tr>
<td>Contract revenues</td>
<td></td>
<td></td>
<td>9,000,000</td>
</tr>
</tbody>
</table>

Closing entries:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Income summary</td>
<td>200,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision for contract loss</td>
<td>200,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract revenues</td>
<td></td>
<td></td>
<td>9,000,000</td>
</tr>
<tr>
<td>Allowance for loss</td>
<td></td>
<td></td>
<td>200,000</td>
</tr>
<tr>
<td>Contract costs</td>
<td></td>
<td></td>
<td>9,020,000</td>
</tr>
<tr>
<td>Income summary</td>
<td></td>
<td></td>
<td>180,000</td>
</tr>
</tbody>
</table>
Illustrative Problem #2
Following is data related to the DeWitt Construction Company and the completed-contract method and the percentage-of-completion method of accounting for long-term contracts for reporting in the Company's financial statements. DeWitt commenced doing business on January 1, 19XA.

Construction activities for the year ended December 31, 19XA:

<table>
<thead>
<tr>
<th>Project</th>
<th>Total Contract</th>
<th>Billings Through December 31, 19XA</th>
<th>Collection</th>
<th>Cash Costs Incurred Through December 31, 19XA</th>
<th>Additional Costs to Complete Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$520,000</td>
<td>$350,000</td>
<td>$310,000</td>
<td>$424,000</td>
<td>$106,000</td>
</tr>
<tr>
<td>B</td>
<td>670,000</td>
<td>210,000</td>
<td>210,000</td>
<td>126,000</td>
<td>504,000</td>
</tr>
<tr>
<td>C</td>
<td>475,000</td>
<td>475,000</td>
<td>395,000</td>
<td>315,000</td>
<td>—</td>
</tr>
<tr>
<td>D</td>
<td>200,000</td>
<td>70,000</td>
<td>50,000</td>
<td>112,750</td>
<td>92,250</td>
</tr>
<tr>
<td>E</td>
<td>460,000</td>
<td>400,000</td>
<td>370,000</td>
<td>30,000</td>
<td>732,250</td>
</tr>
</tbody>
</table>

| Total   | $2,325,000     | $1,505,000                        | $1,365,000 | $1,347,750               | $732,250                              |

All contracts are with different customers.
Any work remaining to be done on the contracts is expected to be completed in 19XB.

DeWitt Construction Company
BALANCE SHEET
December 31, 19XA

Assets

<table>
<thead>
<tr>
<th>Cash</th>
<th>$140,000 (1)</th>
<th>$140,000 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due on contracts</td>
<td>$140,000 (1)</td>
<td>$140,000 (5)</td>
</tr>
<tr>
<td>Cost of uncompleted contracts in excess of billings</td>
<td>116,750 (2)</td>
<td>—</td>
</tr>
<tr>
<td>Costs and estimated earnings in excess of billings on uncompleted contracts</td>
<td>—</td>
<td>127,250 (6)</td>
</tr>
<tr>
<td>Property, plant, and equipment, net</td>
<td>$xxxx</td>
<td>xxxx</td>
</tr>
<tr>
<td>Other assets</td>
<td>$xxxx</td>
<td>$xxxx</td>
</tr>
</tbody>
</table>

Liabilities and Stockholders' Equity

| Accounts payable and accrued liabilities | $114,000 (3) | — |
| Billings on uncompleted contracts in excess of costs | — | $76,000 (7) |
| Billings in excess of costs and estimated earnings | 15,000 (4) | — |
| Estimated losses on uncompleted contracts | xxxx | xxxx |
| Notes payable | xxxx | xxxx |
| Common stock | xxxx | xxxx |
| Retained earnings | $xxxx | $xxxx |
Explanations:

(1)(5) Total billings of $1,505,000 less cash collections of $1,365,000.
(2)(3) See Schedule #3 below.
(4) See Schedule #1 below.
(6)(7) See Schedule #4 below.

Schedule #1
DeWitt Construction Company
SCHEDULE OF REVENUE AND INCOME (LOSS) THAT WOULD BE REPORTED UNDER THE COMPLETED-CONTRACT METHOD AND THE PERCENTAGE-OF-COMPLETION METHOD
For the Year Ended December 31, 19XA

<table>
<thead>
<tr>
<th>Project</th>
<th>Completed-Revenue</th>
<th>Income (Loss)</th>
<th>Project</th>
<th>Percentage-of-Completion</th>
<th>Income (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reported</td>
<td>Costs</td>
<td>Provision for Loss</td>
<td>Reported</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>$10,000</td>
<td>$10,000</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>$475,000</td>
<td>$315,000</td>
<td>$160,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>5,000</td>
<td>(5,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>$475,000</td>
<td>$315,000</td>
<td>$15,000</td>
<td>$145,000</td>
<td></td>
</tr>
</tbody>
</table>

Schedule #2
DeWitt Construction Company
COMPUTATION OF REVENUE RECOGNIZED UNDER THE PERCENTAGE-OF-COMPLETION METHOD
For the Year Ended December 31, 19XA

<table>
<thead>
<tr>
<th>Projects</th>
<th>Revenue</th>
<th>Income (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$416,000</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>134,000</td>
<td>8,000</td>
</tr>
<tr>
<td>C</td>
<td>475,000</td>
<td>160,000</td>
</tr>
<tr>
<td>D</td>
<td>112,750</td>
<td>(5,000)</td>
</tr>
<tr>
<td>E</td>
<td>370,000</td>
<td>55,500</td>
</tr>
</tbody>
</table>

Schedule #3
COMPUTATION OF COSTS IN EXCESS OF BILLINGS AND BILLINGS IN EXCESS OF COSTS INCURRED UNDER THE COMPLETED-CONTRACT METHOD
For the Year Ended December 31, 19XA

<table>
<thead>
<tr>
<th>Project</th>
<th>Costs in Billings</th>
<th>Billings in Excess of Costs Incurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$424,000</td>
<td>$350,000 $74,000</td>
</tr>
<tr>
<td>B</td>
<td>126,000</td>
<td>210,000 $84,000</td>
</tr>
<tr>
<td>D</td>
<td>112,750</td>
<td>70,000 42,750</td>
</tr>
<tr>
<td>E</td>
<td>370,000</td>
<td>400,000 — 30,000</td>
</tr>
<tr>
<td></td>
<td>$1,032,750</td>
<td>$1,030,000 $116,750 $114,000</td>
</tr>
</tbody>
</table>

Schedule #4
COMPUTATION OF COSTS AND ESTIMATED EARNINGS IN EXCESS OF BILLINGS AND BILLINGS IN EXCESS OF COSTS AND ESTIMATED EARNINGS UNDER THE PERCENTAGE-OF-COMPLETION METHOD
For the Year Ended December 31, 19XA

<table>
<thead>
<tr>
<th>Project</th>
<th>Costs and Estimated Earnings</th>
<th>Billings in Excess of Costs and Estimated Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$414,000</td>
<td>$350,000 $64,000</td>
</tr>
<tr>
<td>B</td>
<td>134,000</td>
<td>210,000 $76,000</td>
</tr>
<tr>
<td>D</td>
<td>107,750</td>
<td>70,000 37,750</td>
</tr>
<tr>
<td>E</td>
<td>425,500</td>
<td>400,000 25,500</td>
</tr>
<tr>
<td></td>
<td>$1,081,250</td>
<td>$1,030,000 $127,250 $76,000</td>
</tr>
</tbody>
</table>

INSTALMENT SALES
Sales are made with payment to be received in the current and future accounting periods. Payments received are partly a return of cost and profit.

Key Points:
1. Each year's accounts receivable are maintained separately.
2. Each year has separate gross profit and cost of sales percentage.
3. Unrealized gross profit is the gross profit percentage times the accounts receivable balance for that year.
4. Realized gross profit is the gross profit percentage times the collections of the A/R for a given year.

Accounting Problems:
a. Defaults on installment contracts—loss on defaults would be the balance on the contract times the cost of sales percentage for that year.
For example: In 19X2, $15,000 in 19X1 contracts was defaulted. The cost of sales percentage in 19X1 was 58%. Entry would be:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss on defaulted contracts</td>
<td>$8,700</td>
</tr>
<tr>
<td>Deferred gross profit 19X1</td>
<td>6,300</td>
</tr>
<tr>
<td>Installment Accounts Receivable</td>
<td>$15,000</td>
</tr>
</tbody>
</table>

To record loss and clear deferred gross profit account.

b. Merchandise may be repossessed—

Assume the same facts as in (a) except that merchandise with a wholesale market value of $3,200 was repossessed. Entry:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss on defaulted contracts</td>
<td>$5,500</td>
</tr>
<tr>
<td>Deferred gross profit in 19X1</td>
<td>6,300</td>
</tr>
<tr>
<td>Used merchandise inventory</td>
<td>3,200</td>
</tr>
<tr>
<td>Installment Accounts Receivable</td>
<td>$15,000</td>
</tr>
</tbody>
</table>

C. Trade-Ins—

Trade-ins should be placed on the books at estimated inventory market value. Gross profit is computed based on estimated value of trade-in. Example: Merchandise costing $1,000 was sold for $1,500. A trade-in of $175 was taken having an inventory value of $125. Entry:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installment A/R</td>
<td>$1,325</td>
</tr>
<tr>
<td>Trade-in inventory</td>
<td>125</td>
</tr>
<tr>
<td>Installment Sales</td>
<td>$1,450</td>
</tr>
</tbody>
</table>

Note: Gross profit on sale is $450 and percentage of gross profit is $450/1,450 or 31%.

Illustrative Problem:

**FACTS**: Sale Oct. 15 $8,000

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>6,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>2,000</td>
</tr>
<tr>
<td>Ratio gross profit to selling price</td>
<td>25%</td>
</tr>
<tr>
<td>Down Payment</td>
<td>2,000</td>
</tr>
<tr>
<td>Monthly Payments</td>
<td>500</td>
</tr>
</tbody>
</table>

**Solution**:

10/15

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$2,000</td>
</tr>
<tr>
<td>Installment A/R</td>
<td>6,000</td>
</tr>
<tr>
<td>Installment Sales</td>
<td>$8,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Installment Sales</td>
<td>6,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>6,000</td>
</tr>
</tbody>
</table>

11/15 & 12/15

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$500</td>
</tr>
<tr>
<td>Installment A/R</td>
<td>$500</td>
</tr>
</tbody>
</table>

12/31

Closing Entries:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installment Sales</td>
<td>$8,000</td>
</tr>
<tr>
<td>Cost of Installment Sales</td>
<td>$6,000</td>
</tr>
<tr>
<td>Deferred G.P. on Inst. Sales</td>
<td>1,250</td>
</tr>
<tr>
<td>Realized G.P. on Inst. Sales</td>
<td>750</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realized G.P. on Inst. Sales</td>
<td>750</td>
</tr>
<tr>
<td>Revenue and Exp.</td>
<td>750</td>
</tr>
</tbody>
</table>
Matching Costs and Revenue
Even though procedure of deferring income and not deferring expenses does not result in matching of costs and revenues, it is permissible because of the difficulty of matching costs with revenue.

When Installment Accounting Is Acceptable
AICPA position on Installment Accounting:
"Profit is deemed to be realized when a sale in the ordinary course of business is effected, unless the circumstances are such that the collection of the sale price is not reasonably assured." (Emphasis supplied)
The Board believes that in the absence of the above circumstances, the installment method of accounting is not acceptable. The Board believes that revenues should be ordinarily accounted for at the time a transaction is completed with appropriate provision for uncollectible accounts. Therefore, the installment method would appear to be acceptable, only where receivables are collectible over extended periods, and, because of the terms of the transactions or other conditions, there is no reasonable basis for estimating the degree of collectibility.

Cost-Recovery Method
The Board has also indicated that the cost-recovery method may be used where the installment method is also acceptable. Under the cost-recovery method, equal amounts of revenue and expense are recognized as collections are made until all costs have been recovered, postponing any recognition of profit until that time.

Interest
If installment sales contracts call for interest on uncollected balances, the interest should be taken into income during the period in which it accrues.

Balance Sheet Presentation
Installment receivables may be classified as a current asset if they conform to normal trade practices. Balances should be shown by years (parenthetically). Deferred gross profit should be shown as a contra account from installment accounts receivable.

CORRECTION OF ERRORS
ASC 250 defines accounting errors which qualify as prior period adjustments. Such errors should result in correction of the statements of prior years, if material. These errors usually result from mistake, oversight or misuse of facts.

Types of Errors
Errors which affect the net income of two or more periods and/or the balance sheet of one or more periods can be grouped as counterbalancing and noncounterbalancing errors.

Counterbalancing Errors
This type of error affects the net income of two or more periods, but has no effect on retained earnings for the years for which the statements are being corrected. Assume that the years 1997, 1998, and 1999, are under review and that net income for the three years is to be corrected and a balance sheet is to be prepared for the year ended December 31, 1999. The following are examples of counterbalancing errors.

a. $3,000 of 1996 advertising was paid and recorded as an expense in 1997.
b. The ending inventory for 1997 was understated by $2,500.
c. 1997 real estate taxes of $6,000 payable in 1998 were not accrued as an expense in 1997.
d. The 1999 beginning inventory was overstated by $12,000.
e. A three-year insurance policy totaling $27,000 was paid on January 1, 1997, and charged to expense.
If statements are to be presented only for these years, the specific accounts should be corrected as follows:

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Advertising Expense</td>
<td>$(3,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 1997 Ending Inventory</td>
<td>$(2,500)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Real Estate Taxes</td>
<td>$6,000</td>
<td>$(6,000)</td>
<td></td>
</tr>
<tr>
<td>d. 1999 Beginning Inventory</td>
<td></td>
<td>$12,000</td>
<td>$(12,000)</td>
</tr>
<tr>
<td>e. Insurance Expense</td>
<td>$(18,000)</td>
<td></td>
<td>9,000</td>
</tr>
</tbody>
</table>

1 Beginning retained earnings requires a counterbalancing debit of $3,000.

**Noncounterbalancing Errors**

Such errors require an adjustment to a balance sheet account at the end of the period for which corrections are being made. Examples of such errors are failure to properly record depreciation, amortization or to provide for uncollectible accounts receivable.

For example: Equipment purchased in 1997 costing $11,000 was expensed. The equipment has a ten-year useful life and a $1,000 salvage value. The company uses straight-line depreciation but does not take depreciation in the year of purchase. Correct the years 1997, 1998, and 1999.

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Adjustment</td>
<td>$(11,000)</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
</tbody>
</table>

Journal Entry:

- Equipment $11,000
- Allowance for Depreciation $2,000
- Retained Earnings (12/31/99) 9,000

**ACCOUNTING FOR STOCK OPTIONS AS COMPENSATION**

Stock options are given to employees as another type of compensation. These stock options are normally non-tradable, must be used exclusively by the individual to whom they are granted and include a service period (vesting period) before the options can be exercised.

The benefits of a stock option plan to a corporation are that employee turnover will be reduced because employees will have to remain with the corporation during the service period in order to exercise the stock options and the employees will become stockholders and interested in profit objective of the company.

From the employees’ perspective, they become investors in the corporation and if they exercise the options and hold the shares of stock for the proper time period, the stock can be sold and the gains taxed at the capital gains rate.

The accounting for stock options for the last 10-12 years has been very controversial. GAAP allowed the options to be recorded using either the Intrinsic Value Method (ASC 718) or the Fair Value Method (ASC 718). In December 2004, the FASB released ASC 718 which eliminated the use of the Intrinsic Method and required that stock options be recorded using the Fair Value Method.

The Fair Value Method calculates compensation expense based on the fair value of the options expected to vest on the date the options are granted to employees. The compensation expense is not adjusted after the grant date for subsequent up or down changes in the stock price. The compensation expense is allocated over the vesting period in which the employees are required to perform the service in order to be able to exercise the options. The vesting period (service period) is usually defined as the period between the grant date and the vesting date. The vesting date is the first date that the employees are eligible to exercise the options.
In the calculation of the fair value of the options at the grant date, the FASB discussed two types of option pricing models: the Closed-form model and the Lattice type model. The Black-Sholes-Merton model, which is currently the most popular option pricing model, is an example of a Closed-form valuation model and the Binomial model is an example of a Lattice valuation model.

The FASB does not require a specific option pricing model but does indicate that the model chosen should incorporate the following:

a. the stock price at the grant date  
b. exercise price  
c. expected life of the option  
d. volatility of the stock  
e. expected dividend from the stock  
f. a risk-free interest rate for the expected term of the stock option

A non-public company may not be able to reasonably estimate the volatility of its stock price so the FASB suggested that it uses the historical volatility of an appropriate industry sector index instead.

Disclosures
An entity with one or more share-based payment arrangements shall disclose information that enables users of the financial statements to understand:

a. The nature and terms of such arrangements that existed during the period and the potential effects of those arrangements on the shareholders  
b. The effect of compensation cost arising from share-based payment arrangements on the income statement  
c. The method of estimating the fair value of the goods or services received, or the fair value of the equity instruments granted (or offered to grant), during the period  
d. The cash flow effects resulting from share-based payment arrangements.

Example
On January 1, 2007 Epperson Corp., a software company, grants options to its employees to acquire 10,000 shares of its $1 par value common stock. The options may be exercised beginning January 1, 2009 (the vesting date) and expire on December 31, 2009. The exercise price is $15 per share which is the market price of the shares on the grant date. Epperson uses the Black-Sholes-Merton model, which is a closed form option pricing model, to calculate the fair value of the options. The model estimates the fair value of the options at $5.00 each.

JOURNAL ENTRIES

January 1, 2007
NO JOURNAL ENTRY

MEMO ENTRY – Granted options to purchase 10,000 shares of $1 par common stock at an exercise price of $15 per share. The option pricing model estimates that the fair value is $5.00 each. Therefore, the total compensation is $50,000 (10,000 options x $5 each). The $50,000 compensation should be allocated equally over the two-year service period from January 1, 2007 to December 31, 2008 at $25,000 per year.

December 31, 2007

<table>
<thead>
<tr>
<th>Account Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation Expense</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>Paid in Capital – Stock Options</td>
<td></td>
<td>25,000</td>
</tr>
</tbody>
</table>
December 31, 2008

Compensation Expense  25,000
Paid in Capital – Stock Options  25,000

Year 2009 – Employees exercised 9500 stock options

Cash (9500 options x $15)  142,500
PIC – Stock Options (9500 x $5)  47,500
Common Stock (9500 x $1 par)  9,500
Paid in Capital in Excess of Par  180,500

December 31, 2009 – 500 vested unexercised stock options expire. This forfeiture stock options had not been anticipated by the company.

PIC – Stock Options (500 options x $5)  2,500
PIC – Expired Stock Options  2,500

NOTE: If the stock options were forfeited before they were vested because an employee unexpectedly left the firm, the credit would have been to compensation expense in the period of the forfeiture.

ADDITIONAL CONSIDERATIONS – ANTICIPATED FORFEITURES

If Epperson’s stock option program had a history of an average of 3% forfeitures, this should be reflected in the journal entries for December 31, 2007 and December 31, 2008.

December 31, 2007 and December 31, 2008

Compensation Expense  24,250
PIC-Stock Options  24,250

(Total compensation $50,000 x 97% = $48,500 divided by 2 years = $24,250 per year)

ADDITIONAL CONSIDERATIONS – TAXES

A. If Epperson’s stock option plan qualifies as an incentive plan, the company would not be entitled to a tax deduction and there would not be any tax consequences of the plan.

B. If Epperson’s stock option plan is an unqualified plan, the company may deduct for taxes the difference between the exercise price and the market price of the stock at the exercise date. Since in 2007, Epperson does not know the market price at the exercise date in 2009, ASC 718 assumes that a temporary tax difference is recorded based on the amount recorded as compensation expense related to the stock options. Go back to our original example and assume a corporate tax rate of 40%.

December 31, 2007

Compensation Expense  25,000
PIC – Stock Options  25,000
Deferred Tax Asset ($25,000 x 40%) 10,000  
Income Tax Expense 10,000

A Deferred tax asset is recorded currently for the future tax savings from the tax deduction when the options are exercised in 2009. This matching of the tax reduction in the year that the compensation expense is reduces the net cost of the stock options to $15,000 ($25,000 - $10,000).

December 31, 2008

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation Expense</td>
<td>25,000</td>
</tr>
<tr>
<td>PIC – Stock Options</td>
<td>25,000</td>
</tr>
<tr>
<td>Deferred Tax Asset</td>
<td>10,000</td>
</tr>
<tr>
<td>Income Tax Expense</td>
<td>10,000</td>
</tr>
</tbody>
</table>

Year 2009 – Assume for simplicity that all options (ignore forfeitures) are exercised in 2009.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash (10,000 options x $15)</td>
<td>150,000</td>
</tr>
<tr>
<td>PIC – Stock Options (10,000 x $5)</td>
<td>50,000</td>
</tr>
<tr>
<td>Common Stock (10,000 x $1 Par)</td>
<td>10,000</td>
</tr>
<tr>
<td>Paid in Capital in Excess of Par</td>
<td>190,000</td>
</tr>
</tbody>
</table>

A. Assume that the options are exercised when the tax benefit exceeds the deferred tax asset. Assume that the options are exercised when the market price is $22 per share.

Year 2009

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Tax Payable*</td>
<td>28,000</td>
</tr>
<tr>
<td>PIC – Tax Effect of Stock Options**</td>
<td>8,000</td>
</tr>
<tr>
<td>Deferred Tax Asset ($10,000 x 2 yrs.)</td>
<td>20,000</td>
</tr>
</tbody>
</table>

* Mkt price $22 – Exercise price $15 = $7 x 10,000 shares = $70,000 x 40% tax rate = $28,000

**NOTE: The ASC calls this amount “Excess Tax Benefits.” Cash retained as a result of these “excess tax benefits” will be presented on the Statement of cash flows as a financing cash flow rather than an operating cash flow.

B. Assume the stock options are exercised when the tax benefits are less than the deferred tax asset. Assume that the market price on the exercise date is $18.

Year 2009

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Tax Payable*</td>
<td>12,000</td>
</tr>
<tr>
<td>Income Tax Expense**</td>
<td>8,000</td>
</tr>
<tr>
<td>Deferred Tax Asset</td>
<td>20,000</td>
</tr>
</tbody>
</table>

* Mkt. Price $18 – Exercise Price $15 = $3 x 10,000 shares + $30,000 x 40% = $12,000

**NOTE: The usual entry will probably be to debit Income Tax Expense. However, if Epperson has previous transactions in stock options that created a balance in PIC – Tax Effect of Stock Options, this account should be debited first and once that account is reduced to zero, then the debit should be to Income Tax Expense.
STOCK APPRECIATION RIGHTS (SARS)

SARS are compensation awards given to employees for the difference between the market price of the stock at the exercise date and the market price at the date of the grant. The advantage of SARS over stock options is that the employees do not have to come up with any cash to take advantage of the SARS.

Historically, the accounting for SARS has been to use the Intrinsic Value method. This method simply took the market price of the stock at the end of the period and compared it to the market price at the grant date and the difference was the “appreciation.” This “appreciation” was debited to compensation expense and credited to an account, liability-SARS. At the end of subsequent periods up to the exercise date of the SARS, the expense and liability were adjusted for the change in “appreciation.” This method is still acceptable for non-public companies.

However, for public companies ASC 718 eliminated the intrinsic method and replaced it with the fair value method in order to be consistent with the method used for stock options. Therefore, rather than comparing the market price of the stock at the end of the period with the market price at the grant date, the FASB requires that the fair value of the SARS be calculated annually using the same type of option pricing model that was used for stock options. This compensation, like stock options is allocated over the vesting period (service period). The difference is the compensation is adjusted annually for any change in the value of the SARS based on the annual calculation of the option pricing model.

EXAMPLE

On January 1, when the market price of its stock is $15, Epperson corp., a software company, grants 10,000 SARS to its employees. When the SARS are exercised, the employees will receive cash for the difference between the market price of the stock at the exercise date and the market price at the grant date. The SARS may be exercised between January 1, 2009, the vesting date, and December 31, 2009, the expiration date. Epperson uses the Black-Sholes-Merton model and calculates the value of the SARS at $5 each on December 31, 2007.

JOURNAL ENTRIES

January 1, 2007

NO JOURNAL ENTRY

MEMO ENTRY – Granted 10,000 SARS to employees when the current market price is $15 per share. The Black-Sholes-Merton pricing model estimates the fair value of the SARS at $5 each. Therefore, the total compensation associated with the SARS is $50,000 (10,000 SARS x $5). The total compensation is allocated over the two-year service period and should be $25,000 for 2007 ($50,000/2 years).

December 31, 2007

Compensation Expense 25,000
Liability – SARS 25,000

December 31, 2008

The Black-Sholes-Merton model calculates the December 31, 2008 SARS value at $6 each. The total compensation is now $60,000. Therefore, the 2008 compensation should be $35,000 ($60,000-$25,000 in 2007). This is considered as a change in accounting estimate and would not be retroactive adjustment.

Compensation Expense 35,000
Liability – SARS 35,000
Assume for simplicity that all the SARS are exercised on the same day in 2009 when the market value per share is $21.50 per share. Compare the $21.50 per share to $15 per share at the grant date and the stock appreciation is $6.50 per share. Therefore, the total compensation is $65,000 (10,000 SARS x $6.50). Since Epperson recorded a total of $60,000 in 2007 and 2008, an additional $5,000 should be recorded in 2009 as a change in accounting estimate.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation Expense</td>
<td>5,000</td>
</tr>
<tr>
<td>Liability – SARS</td>
<td>60,000</td>
</tr>
<tr>
<td>Cash (10,000 SARS x $6.50)</td>
<td>65,000</td>
</tr>
</tbody>
</table>

NOTE: The accounting for taxes and forfeitures were discussed with stock options and will not be repeated.

**Restricted Stock Plans**

Restricted Stock Plans are another way to reward employees with company stock but restrict the technical release of the stock until some future period of employment when the rights to the shares vest. Usually under restricted stock plans, shares are awarded in the name of the employee, the employee has all the rights of a shareholder, the employee is not allowed to sell the stock during the vesting period and the stock normally remains in the physical possession of the company until the vesting period is complete.

EXAMPLE

On January 1, 2007 Epperson Corp., a software company, awards 10,000 shares of its $1 Par common stock to its employees in a restricted stock plan. The stock is currently selling for $5 per share. The stock will not be released to the employees until they complete a vesting period of two years.

January 1, 2007

NO JOURNAL ENTRY

MEMO ENTRY – Granted 10,000 shares of $1 PAR common stock to employees in a restricted stock plan. The stock will not be released to employees for two years and the current market price is $5 per share. Therefore the total compensation is $50,000 (10,000 shares x $5 per share) to be allocated equally over two years at $25,000 per year.

December 31, 2007

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation Expense</td>
<td>25,000</td>
</tr>
<tr>
<td>PIC – Restricted Stock</td>
<td>25,000</td>
</tr>
</tbody>
</table>

December 31, 2008

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation Expense</td>
<td>25,000</td>
</tr>
<tr>
<td>PIC – Restricted Stock</td>
<td>25,000</td>
</tr>
</tbody>
</table>

December 31, 2008 — The vesting period of two years is complete. The restriction is released and the common stock is issued.
PIC-Restricted Stock 50,000
Common Stock ($1 Par x 10,000) 10,000
Paid in Capital in Excess of Par 40,000

NOTE: The restricted stock plan does not use the Fair Value Pricing Model that was used in stock options and SARS because theoretically the stock was issued at the fair value on January 1, 2007.

Stock Purchase Plans
Entities that offer stock purchase plans do not incur any compensation cost if the plan allows a small discount of 5% or less, offers the plan to substantially all of its full-time employees and the plan does not have any other option feature except the discount. However, for companies which offer employee purchase plans above 5%, the entire discount is recorded as compensation expense.

ESOPS
Companies with Employee Stock Ownership Plans (ESOPs) recognize expense when cash and/or stocks are contributed to the plan (stocks measured at FMV). When the ESOP borrows funds to purchase company stock, the company reports an equal reduction in shareholders' equity and an increase in debt for the endorsed note payable of the ESOP when the loan is so guaranteed.

Deferred Compensation Contracts
Deferred compensation contracts should be accounted for individually on an accrual basis. If the contract is equivalent to a pension plan, apply ASC 715, "Accounting for the Cost of Pension Plans." Deferred compensation contracts customarily include requirements such as continued employment for a specified period and availability for consulting services and agreements not to compete after retirement, which, if not complied with, remove the employer's obligations for future payments. The estimated amounts to be paid under each contract should be accrued over the period of active employment from the time the contract is entered into, unless it is evident that future services are commensurate with the payments to be made. If both current and future services are involved, only the portion applicable to the current services should be accrued.

Where contracts provide for periodic payments to employees or their surviving spouses for life, the estimated amount of future payments should be accrued over the period of active employment. Estimates should be based on the life expectancy of each individual concerned or on the estimated cost of an annuity contract.

CASH TO ACCRUAL
At times, incomplete or cash basis statements are presented, and candidates are asked to convert such statements to the accrual basis (or vice versa) based on supplemental information furnished. To convert to the accrual basis:
1. Cash sales must be adjusted to sales recognized under GAAP.
2. Purchases must be converted to the accrual basis.
3. Cost of goods sold must be computed taking into account purchases in (2) above and beginning and ending inventories.
4. Expenses must be converted to the accrual basis recognizing accrued expenses at the beginning and end of the period.
5. Other items of revenue and cost expirations under GAAP must be recognized such as:
   - Income tax allocation
   - Amortization of intangibles
   - Receivables and payables requiring imputed interest computations

TIMING OF REVENUE AND EXPENSES—ACCRUAL BASIS
The timing of revenue and expense recognition has been the subject of exam questions in recent years. These questions generally relate to insurance expense, warranty expense, royalty expense or revenue, service contract
revenue, and similar areas. In most cases, the question will describe the company’s recognition policy. Income and expense in these areas are recognized on a strict accrual basis and the cash exchanges generally should not impact the recognition of income or expense. It is helpful to understand the function of the related balance sheet account.

Example #1: Under Hart Company’s accounting system, all insurance premiums paid are debited to prepaid insurance. For interim financial reports, Hart makes monthly estimated charges to insurance expense with credits to prepaid insurance. Additional information for the year ended December 31, 1999, is as follows:

- Prepaid insurance at December 31, 1998: $210,000
- Charges to insurance expense during 1999 (including a year-end adjustment of $35,000): $875,000
- Unexpired insurance premiums at December 31, 1999: $245,000

What was the total amount of insurance premiums paid by Hart during 1999?

a. $910,000
b. $875,000
c. $840,000
d. $665,000

Solution:

<table>
<thead>
<tr>
<th>Prepaid Insurance</th>
<th>1999 Expense Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance 12/31/98: 210,000</td>
<td>875,000</td>
</tr>
<tr>
<td>Premiums paid: ?</td>
<td></td>
</tr>
<tr>
<td>Balance 12/31/99: 245,000</td>
<td></td>
</tr>
</tbody>
</table>

In order to generate a balance of $245,000 in the "prepaid insurance" account, the premiums paid in 1999 must have been $910,000.

\[
210,000 - 875,000 + x = 245,000
\]

\[
x = 910,000 \quad \text{Answer (a)}
\]

Example #2: Lane Company acquires copyrights from authors, paying advance royalties in some cases, and in others, paying royalties within 30 days of year end. Lane reported royalty expense of $375,000 for the year ended December 31, 1999. The following data are included in Lane’s December 31 balance sheets:

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepaid royalties</td>
<td>$60,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Royalties payable</td>
<td>75,000</td>
<td>90,000</td>
</tr>
</tbody>
</table>

During 1999 Lane made royalty payments totaling

a. $350,000
b. $370,000
c. $380,000
d. $400,000

Solution: The net effect of the balance sheet accounts is a net credit of $25,000 (asset decreased by $10,000 and liability increased by $15,000). Therefore, if the expense was $375,000 for the year and the impact on the prepaid and accrual accounts was a credit of $25,000, then the cash payment must have been $350,000—answer (a).
PERSONAL FINANCIAL STATEMENTS

- A statement of financial position is required.
- A statement of changes in net worth is optional.
- Income statements and statements of cash flows are not usually disclosed.
- In presenting Personal Financial Statement, assets and liabilities are reported at estimated current values.

Features of Personal Financial Statements

**Title of Statement:** Statement of Financial Position

**Categories:**
- Assets – listed in order of liquidity (not a current/non-current basis)
- Liabilities – listed in order of maturity (not a current/non-current basis)
- Estimated income taxes on the excess of the estimated current values of assets over their tax basis.

**Net Worth**

**Data Presentation:**
- Use estimated fair market value
- Cost may be shown in comparison if desired
- Use accrual basis of accounting

**Other Points:**
1. Income taxes should be accrued on unrealized asset appreciation.
2. Deferred income taxes should be included where appropriate to reflect timing differences between financial statement and income tax reporting.

BANK RECONCILIATIONS

Because of the differences in the timing of recording transactions, the cash balance per books and the balance per the bank statement will not agree. Further, it is probable that neither the bank statement nor the balance per books represents the correct balance of cash at the date of reconciliation. The basic form of the standard bank reconciliation is therefore an adjustment of both balances to the balances of cash on hand, as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance per bank 12/31/X1</td>
<td>$65,000</td>
</tr>
<tr>
<td>Less: Outstanding checks</td>
<td>14,000</td>
</tr>
<tr>
<td></td>
<td>$51,000</td>
</tr>
<tr>
<td>Add: Deposits in transit</td>
<td>$7,000</td>
</tr>
<tr>
<td>Check erroneously charged</td>
<td>500</td>
</tr>
<tr>
<td>Correct bank balance 12/31/X1</td>
<td>$58,500</td>
</tr>
<tr>
<td>Balance per books 12/31/X1</td>
<td>$53,112</td>
</tr>
<tr>
<td>Less: Bank Service Charge</td>
<td>12</td>
</tr>
<tr>
<td>NSF check of Vulcan Co.</td>
<td>600</td>
</tr>
<tr>
<td>Correct bank balance 12/31/X1</td>
<td>$58,500</td>
</tr>
</tbody>
</table>

Adjusting entries should be made for any items reconciling the book balance:

(1) Bank Service Charge, Expense  12
Account Receivable, Vulcan Co.  600
Cash  612

To record bank service charge and reinstate A/R
RECOGNIZING REVENUE WHEN RIGHT OF RETURN EXISTS—ASC 605

If an enterprise sells its product but gives the buyer rights to return the product, revenue from the sales transaction shall be recognized at time of sale only if all of the following conditions are met:

(a) The seller's price to the buyer is substantially fixed or determinable at the date of sale.
(b) The buyer has paid the seller, or the buyer is obligated to pay the seller and the obligation is not contingent on resale of the product.
(c) The buyer's obligation to the seller would not be changed in the event of theft or physical destruction or damage of the product.
(d) The buyer acquiring the product for resale has economic substance apart from that provided by the seller.
(e) The seller does not have significant obligations for the future performance to directly bring about resale of the product by the buyer.
(f) The amount of future returns can be reasonably estimated.

Sales revenue and cost of sales that are not recognized at time of sale because the foregoing conditions are not met shall be recognized either when the return privilege has substantially expired or if those conditions subsequently are met, whichever occurs first.

If sales revenue is recognized because the above conditions are met, any costs or losses that may be expected in connection with any returns shall be accrued in accordance with FASB Statement No. 5, Accounting for Contingencies. Sales revenue and cost of sales reported in the income statement shall be reduced to reflect estimated returns.

ACCOUNTING FOR FRANCHISE FEE REVENUE—ASC 605

Franchise fee revenue from an individual franchise sale is ordinarily recognized when all material services or conditions relating to the sale have been substantially performed or satisfied by the franchisor. Installment or cost recovery accounting methods should be used to account for franchise fee revenue only in those exceptional cases when the franchise revenue is collectible over an extended period and no reasonable basis exists for estimating collectibility.

If an initial franchise fee is substantial in comparison to the continuing franchise fee and the services to be performed in the future, a portion of the initial fee should be deferred and amortized over the life of the franchise. The portion deferred should be an amount sufficient to cover the costs of (and reasonable profit on) the continuing services to be provided.

If the franchise agreement contains other options for which there is reasonable expectation for exercise, then that portion of the initial franchise fee attributable to such option should be deferred and, upon exercise, allocated to the asset acquired as a result of such exercise.

Franchisor Disclosures

(a) The nature of all significant franchising commitments and agreements.
(b) Revenue and related costs deferred (and the period due to be collected) for any fees accounted for using the installment or cost recovery method.
(c) Segregation of initial franchise fees from other franchise fee revenue.
(d) Revenue and costs related to franchisor-owned outlets shall be distinguished from revenue and costs related to franchised outlets when practicable. That may be done by segregating revenue and costs related to
franchised outlets. If there are significant changes in franchisor-owned outlets or franchised outlets during the period, the number of (a) franchises sold, (b) franchises purchased during the period, (c) franchised outlets in operation and (d) franchisor-owned outlets in operation shall be disclosed.

Illustrative Problem
Southern Fried Shrimp sells franchises to independent operators throughout the Southeastern part of the United States. The contract with the franchisee includes the following provisions:

- The franchisee is charged an initial fee of $25,000. Of this amount $5,000 is payable when the agreement is signed and a $4,000 noninterest bearing note is payable at the end of each of the five subsequent years.
- All of the initial franchise fee collected by Southern Fried Shrimp is to be refunded and the remaining obligation canceled if, for any reason, the franchisee fails to open his franchise.
- In return for the initial franchise fee Southern Fried Shrimp agrees to (1) assist the franchisee in selecting the location for his business, (2) negotiate the lease for the land, (3) obtain financing and assist with building design, (4) supervise construction, (5) establish accounting and tax records and (6) provide expert advice over a five-year period relating to such matters as employee and management training, quality control and promotion.
- In addition to the initial franchise fee the franchisee is required to pay to Southern Fried Shrimp a monthly fee of 2% of sales for menu planning, recipe innovations and the privilege of purchasing ingredients from Southern Fried Shrimp at or below prevailing market prices.

Management of Southern Fried Shrimp estimates that the value of the services rendered to the franchisee at the time the contract is signed amounts to at least $5,000. All franchisees to date have opened their locations at the scheduled time and none has defaulted on any of the notes receivable.

The credit ratings of all franchisees would entitle them to borrow at the current interest rate of 10%. The present value of an ordinary annuity of five annual receipts of $4,000 each discounted at 10% is $15,163.

Required:
Given the nature of Southern Fried Shrimp's agreement with its franchisees, when should revenue be recognized? Discuss the question of revenue recognition for both the initial franchise fee and the additional monthly fee of 2% of sales and give illustrative entries for both types of revenue.

Illustrative Solution
Because the initial cash collection of $5,000 must be refunded if the franchisee fails to open, it is not fully earned until the franchisee begins operations so that Southern Fried Shrimp should record the initial franchise fee as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 5,000</td>
</tr>
<tr>
<td>Notes Receivable</td>
<td>20,000</td>
</tr>
<tr>
<td>Discount on Notes Receivable</td>
<td></td>
</tr>
<tr>
<td>Unearned Initial Franchise Fee</td>
<td>20,163</td>
</tr>
</tbody>
</table>

When the franchisee begins operations, the $5,000 would be earned and the following entry should be made:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unearned Initial Franchise Fee</td>
<td>$ 5,000</td>
</tr>
<tr>
<td>Earned Initial Franchise Fee</td>
<td></td>
</tr>
</tbody>
</table>

After Southern Fried Shrimp has experienced the opening of a large number of franchises, it should be possible to
develop probability measures so that the expected value of the retained initial franchise fee can be determined and recorded as earned at the time of receipt.

Interest at 10% should be accrued each year by a debit to Discount on Notes Receivable and a credit to Interest Revenue. Each year as the services are rendered an appropriate amount would be transferred from Unearned Initial Franchise Fee to Earned Initial Franchise Fee. Since these annual payments are not refundable, the Earned Initial Franchise Fee revenue might be recognized at the time the $4,000 is collected, but this may result in the mismatching of cost and revenue.

At the time that a franchise opens, only two steps remain before Southern Fried Shrimp will have fully earned the entire franchise fee. First, it must provide expert advice over the five-year period. Second, it must wait until the end of each of the next five years so that it may collect each of the $4,000 notes. Since collection has not been a problem, it could be maintained that a substantial portion of the $15,163, the present value of the notes, should be recognized as revenue when a franchisee begins operations. At some time in the future, after Southern Fried Shrimp has experienced a large number of franchises that have opened and operated for five years or more, it should be possible to develop probability measures so that the earned portion of the present value of the notes may be recognized as revenue at the time the franchisee begins operations.

The monthly fee of 2% of sales should be recorded as revenue at the end of each month. This fee is for current services rendered and should be recognized as the services are performed.

REAL ESTATE SALES—ASC 605
Sales of Real Estate (other than retail land sales)
Profit is recognized in full when real estate is sold, provided (a) the profit is determinable, (collectibility of the sales price is reasonably assured or the amount that will not be collectible can be estimated), and (b) the seller is not obliged to perform significant activities after the sale to earn the profit. Unless both conditions exist, recognition of all or part of the profit shall be postponed.

Full profit on real estate sales transactions shall not be recognized until all of the following criteria are met:
(a) A sale is consummated (usually at closing).
(b) The buyer's initial and continuing investments are adequate to demonstrate a commitment to pay for the property.
(c) The seller's receivable is not subject to future subordination.
(d) The seller has transferred to the buyer the usual risks and rewards of ownership in a transaction that is in substance a sale and the seller does not have a substantial continuing involvement with the property.

ACCOUNTING FOR FUTURES CONTRACTS—ASC 815
A gain or loss resulting from a change in the market value of a futures contract should be recognized in income except when such a contract is a hedge of specified assets, liabilities or firm commitments. Such an exception must result from a hedge against price or interest rate risk; terms of the transaction must be identified, and it should be probable that such a transaction will occur.

COMPREHENSIVE BASES OF ACCOUNTING OTHER THAN GAAP
The following accounting bases may be used to prepare financial statements in conformity with a comprehensive basis of accounting other than GAAP:
  a. Basis of accounting used by an entity to file its income tax return.
  b. Cash receipts and disbursements basis of accounting.
  c. Cash basis.
  d. Modifications of cash basis such as accruing income taxes and recording depreciation.
e. A definite set of criteria having substantial support that is applied to all material items. For example: constant dollar or current cost statements.

**IFRS - REVENUE RECOGNITION**

The only difference between IFRS and US GAAP is that IFRS does not allow the use of the completed contract method.

<table>
<thead>
<tr>
<th></th>
<th>IFRS</th>
<th>US GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term contracts</td>
<td>Percentage of completion</td>
<td>Percentage of completion</td>
</tr>
<tr>
<td></td>
<td>Not allowed</td>
<td>Completed contract method</td>
</tr>
</tbody>
</table>
Chapter Ten
Revenue and Expense Recognition, Miscellaneous Items Questions

LONG-TERM CONTRACTS

1. The percentage-of-completion method of accounting for long-term construction-type contracts is preferable when
   a. Estimates of costs to complete and extent of progress toward completion are reasonably dependable.
   b. The collectibility of progress billings from the customer is reasonably assured.
   c. A contractor is involved in numerous projects.
   d. The contracts are of a relatively short duration.

2. How should the balances of progress billings and construction in progress be shown at reporting dates prior to the completion of a long-term contract?
   a. Progress billings as deferred income, construction in progress as a deferred expense.
   b. Progress billings as income, construction in progress as inventory.
   c. Net, as a current asset if debit balance and current liability if credit balance.
   d. Net, as income from construction if credit balance, and loss from construction if debit balance.

Items 3 and 4 are based on the following data relating to a construction job started by Syl Co. during 1993:

<table>
<thead>
<tr>
<th>Total contract price</th>
<th>$100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual costs during 1993</td>
<td>20,000</td>
</tr>
<tr>
<td>Estimated remaining costs</td>
<td>40,000</td>
</tr>
<tr>
<td>Billed to customer during 1993</td>
<td>30,000</td>
</tr>
<tr>
<td>Received from customer during 1993</td>
<td>10,000</td>
</tr>
</tbody>
</table>

3. Under the completed contract method, how much should Syl recognize as gross profit for 1993?
   a. $0
   b. $4,000
   c. $10,000
   d. $12,000

4. Under the percentage-of-completion method, how much should Syl recognize as gross profit for 1993?
   a. $0
   b. $13,333
   c. $26,667
   d. $33,333

5. Hansen Construction, Inc., has consistently used the percentage-of-completion method of recognizing income. During 1997 Hansen started work on a $3,000,000 fixed-price construction contract. The accounting records disclosed the following data for the year ended December 31, 1997:

| Costs incurred | $930,000 |
| Estimated cost to complete | 2,170,000 |
| Progress billings | 1,100,000 |
| Collections | 700,000 |

How much loss should Hansen have recognized in 1997?
   a. $230,000
   b. $100,000
   c. $30,000
   d. $0

6. During 1995, Mitchell Corp. started a construction job with a total contract price of $600,000. The job was completed on December 15, 1996. Additional data are as follows:

<table>
<thead>
<tr>
<th>1995</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual costs incurred</td>
<td>$225,000</td>
</tr>
<tr>
<td>Estimated remaining costs</td>
<td>225,000</td>
</tr>
<tr>
<td>Billed to customer</td>
<td>240,000</td>
</tr>
<tr>
<td>Received from customer</td>
<td>200,000</td>
</tr>
</tbody>
</table>

Under the completed contract method, what amount should Mitchell recognize as gross profit for 1996?
   a. $45,000
   b. $72,000
   c. $80,000
   d. $120,000
7. Mill Construction Co. uses the percentage-of-completion method of accounting. During 1996, Mill contracted to build an apartment complex for Drew for $20,000,000. Mill estimated that total costs would amount to $16,000,000 over the period of construction. In connection with this contract, Mill incurred $2,000,000 of construction costs during 1996. Mill billed and collected $3,000,000 from Drew in 1996. What amount should Mill recognize as gross profit for 1996?

a. $250,000  
b. $375,000  
c. $500,000  
d. $600,000

8. Cord Builders, Inc., has consistently used the percentage-of-completion method of accounting for construction-type contracts. During 1991 Cord started work on a $9,000,000 fixed-price construction contract that was completed in 1993. Cord's accounting records disclosed the following:

<table>
<thead>
<tr>
<th>December 31</th>
<th>1991</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative contract costs incurred</td>
<td>$3,900,000</td>
<td>$6,300,000</td>
</tr>
<tr>
<td>Estimated total costs at completion</td>
<td>7,800,000</td>
<td>8,100,000</td>
</tr>
</tbody>
</table>

How much income would Cord have recognized on this contract for the year ended December 31, 1992?

a. $100,000  
b. $300,000  
c. $600,000  
d. $700,000

THEORY REVIEW

11. A company uses the completed-contract method to account for a long-term construction contract. Revenue is recognized when recorded progress billings are collected. Are recorded costs recognized?

a. Yes Yes  
b. No No  
c. Yes No  
d. No Yes

12. A company used the percentage-of-completion method of accounting for a 5-year construction contract. Which of the following items will the company use to calculate the income recognized in the third year?

a. Progress billings to date  
b. Income previously recognized  
c. Yes  
d. No  

13. The calculation of the income recognized in the third year of a five-year construction contract accounted for using the percentage-of-completion method includes the ratio of:

a. Total costs incurred to date to total estimated costs.  
b. Total costs incurred to date to total billings to date.  
c. Costs incurred in year 3 to total estimated costs.  
d. Costs incurred in year 3 to total billings to date.
14. Which of the following would be used in the calculation of the income recognized in the fourth and final year of a contract accounted for by the percentage-of-completion method?

<table>
<thead>
<tr>
<th>Actua Actual</th>
<th>Income previously</th>
</tr>
</thead>
<tbody>
<tr>
<td>l total costs</td>
<td>recognized</td>
</tr>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

**INSTALLMENT SALES**

15. The installment method of recognizing revenue
a. Should be used only in cases where there is no reasonable basis for estimating the collectibility of receivables.
b. Is not a generally accepted accounting principle under any circumstances.
c. Should be used for book purposes only if it is used for tax purposes.
d. Is an acceptable alternative accounting principle for a firm which makes installment sales.

16. Ryan, Inc., began operations on January 1, 1993, and appropriately uses the installment method of accounting. The following data are available for 1993:

| Installment accounts receivable, | $ 600,000 |
| 12/31/93 | Installment sales for 1993 | $ 1,050,000 |
| Installment sales for 1993 | 1,050,000 |
| Gross profit on sales | 40% |

Under the installment method, Ryan's deferred gross profit at December 31, 1993, would be:

| a. $360,000 |
| b. $270,000 |
| c. $240,000 |
| d. $180,000 |

18. Green Company, which began operations on January 1, 1997, appropriately uses the installment method of accounting. The following information is available for 1997:

| Gross profit on sales | 40% |
| Deferred gross profit at 12/31/97 | $240,000 |
| Cash collected, including down payments | 450,000 |

What is the total amount of Green's installment sales for 1997?

| a. $600,000 |
| b. $690,000 |
| c. $850,000 |
| d. $1,050,000 |

19. Hill Company began operations on January 1, 1994, and appropriately uses the installment method of accounting. Data available for 1994 are as follows:

| Installment accounts receivable, | $500,000 |
| 12/31/94 | Installment sales | 900,000 |
| Cost of goods sold, as percentage of sales | 60% |

Using the installment method, Hill's realized gross profit for 1994 would be:

| a. $360,000 |
| b. $240,000 |
| c. $200,000 |
| d. $160,000 |
20. Dolce Co., which began operations on January 1, 1997, appropriately uses the installment method of accounting to record revenues. The following information is available for the years ended December 31, 1997 and 1998:

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$1,000,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Gross profit realized on sales made in:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>150,000</td>
<td>90,000</td>
</tr>
<tr>
<td>1998</td>
<td>—</td>
<td>200,000</td>
</tr>
<tr>
<td>Gross profit percentages</td>
<td>30%</td>
<td>40%</td>
</tr>
</tbody>
</table>

What amount of installment accounts receivable should Dolce report in its December 31, 1998, balance sheet?

a. $1,225,000
b. $1,300,000
c. $1,700,000
d. $1,775,000

**COST-RECOVERY METHOD**

21. According to the cost-recovery method of accounting, gross profit on an installment sale is recognized in income
a. After cash collections equal to the cost of sales have been received.
b. In proportion to the cash collections.
c. On the date the final cash collection is received.
d. On the date of sale.

22. Several of Fox, Inc.'s customers are having cash flow problems. Information pertaining to these customers for the years ended March 31, 1998 and 1999, follows:

<table>
<thead>
<tr>
<th></th>
<th>3/31/98</th>
<th>3/31/99</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$10,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>8,000</td>
<td>9,000</td>
</tr>
<tr>
<td>Cash collections on 1998 sales</td>
<td>7,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Cash collections on 1999 sales</td>
<td>--</td>
<td>12,000</td>
</tr>
</tbody>
</table>

If the cost-recovery method is used, what amount would Fox report as gross profit from sales to these customers for the year ended March 31, 1999?

a. $2,000
b. $3,000
c. $5,000
d. $15,000

**ERRORS**

23. Loeb Corp. frequently borrows from the bank in order to maintain sufficient operating cash. The following loans were at a 12% interest rate, with interest payable at maturity. Loeb repaid each loan on its scheduled maturity date.

<table>
<thead>
<tr>
<th>Date of loan</th>
<th>Amount</th>
<th>Maturity date</th>
<th>Term of loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/1/96</td>
<td>$5,000</td>
<td>10/31/97</td>
<td>1 Year</td>
</tr>
<tr>
<td>2/1/97</td>
<td>15,000</td>
<td>7/31/97</td>
<td>6 Months</td>
</tr>
<tr>
<td>5/1/97</td>
<td>8,000</td>
<td>1/31/98</td>
<td>9 Months</td>
</tr>
</tbody>
</table>

Loeb records interest expense when the loans are repaid. As a result, interest expense of $1,500 was recorded in 1997. If no correction is made, by what amount would 1997 interest expense be understated?

a. $540
b. $620
c. $640
d. $720

**Items 24, 25, 26** are based on the following information:

Declaration, Inc., is a calendar year corporation. Its financial statements for the years 1999 and 1998 contained errors as follows:

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ending inventory</td>
<td>understated</td>
<td>overstated</td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>understated</td>
<td>overstated</td>
</tr>
</tbody>
</table>

24. Assume that the proper correcting entries were made at December 31, 1998. By how much will 1999 income before income taxes be overstated or understated?

a. $200 understated.
b. $500 overstated.
c. $2,700 understated.
d. $3,200 understated.

25. Assume that no correcting entries were made at December 31, 1998. Ignoring income taxes, by how much will retained earnings at December 31, 1999, be overstated or understated?

a. $200 understated.
b. $500 overstated.
c. $2,700 understated.
d. $3,200 understated.
26. Assume that no correcting entries were made at December 31, 1998, or December 31, 1999, and that no additional errors occurred in 2000. Ignoring income taxes, by how much will working capital at December 31, 2000, be overstated or understated?
- $0.
- $1,000 overstated.
- $1,000 understated.
- $1,700 understated.

EMPLOYEE STOCK OPTIONS

27. On June 1, 20X6, Oak Corp. granted stock options to certain key employees as additional compensation. The options were for 1,000 shares of Oak’s $2 par value common stock at an option price of $15 per share. Market price of this stock on June 1, 20X6, was $20 per share. The options were exercisable beginning January 2, 20X7, and expire on December 31, 20XX.

Oak Corp. used the binomial option pricing model and estimated the value of each option at $7.

On April 1, 20X7, when Oak’s stock was trading at $21 per share, all the options were exercised. What amount of pretax compensation should Oak report in 20X6 in connection with the options?
- $6,000
- $5,000
- $2,500
- $7,000

The following information is for questions 28 & 29:

28. On January 1, 20X6, Doro Corp. granted an employee an option to purchase 3,000 shares of Doro’s $5 par value common stock at $20 per share. The option became exercisable on December 31, 20X7, after the employee completed two years of service. The option was exercised on January 10, 20X8. The market prices of Doro’s stock were as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 20X6</td>
<td>$30</td>
</tr>
<tr>
<td>December 31, 20X7</td>
<td>50</td>
</tr>
<tr>
<td>January 10, 20X8</td>
<td>45</td>
</tr>
</tbody>
</table>

The Black-Sholes-Merton option pricing model estimated the value of the options at $8 each.

For 20X6, Doro should recognize compensation expense of
- $45,000
- $12,000
- $15,000
- $0

29. Assume that Doro’s plan is an unqualified plan and that the corporate tax rate is 30%, calculate the after tax cost of the stock option plan on the income statement.
- $8,400
- $4,800
- $3,600
- $7,800

30. ASC 718 suggests the use of two types of option pricing models. Which of the following models are mentioned in the pronouncement?
- Black-Sholes-Merton Model
- Lattice Type Model
- Binomial Model
- Closed-Exit Model

31. Which of the following method(s) is (are) considered GAAP for recording stock option plans under ASC 718?
- Intrinsic and Fair Value Methods
- Intrinsic Method
- Fair Value and Service Period Method
- Fair Value Method

Questions 32 and 33 use the following data:

32. On January 2, 20X6, Morey Corp. granted Dean, its president, 20,000 stock appreciation rights. On exercise, Dean is entitled to receive cash for the excess of the stock’s market price on the exercise date over the market price on the grant date. The rights are exercisable beginning on January 2, 20X8 and expiring on December 31, 20X8. The market price of Morey’s stock was $30 on January 2, 20X6 and $45 on December 31, 20X6. Morey used the Black-Sholes-Merton pricing model and estimated the values of each right at $16 each. As a result of the stock appreciation rights, the company should recognize compensation expense for 20X6 of
- $300,000
- $320,000
- $150,000
- $160,000

33. At December 31, 20X7, the market price of the stock is $47 and the Black-Sholes-Merton pricing model estimated the value of the option at $18. At December 31, 20X7, Morey Corp should report on its balance sheet a liability for stock appreciation rights of
- $340,000
- $360,000
- $40,000
- $60,000
EMPLOYEE STOCK PURCHASE PLAN

34. Wall Corp.’s employee stock purchase plan specifies the following:
   • For every $1 withheld from employees’ wages for the purchase of Wall’s common stock, Wall contributes $2.
   • The stock is purchased from Wall’s treasury stock at market price on the date of purchase.

The following information pertains to the plan’s 1997 transactions:
   • Employee withholdings for the year $350,000
   • Market value of 150,000 shares issued $1,050,000
   • Carrying amount of treasury stock issued (cost) $900,000

Before payroll taxes, what amount should Wall recognize as expense in 1997 for the stock purchase plan?
   a. $1,050,000
   b. $900,000
   c. $700,000
   d. $550,000

ESOPs

35. On January 1, 1995, Heath Corp. established an employee stock ownership plan (ESOP). Selected transactions relating to the ESOP during 1995 were as follows:
   • On April 1, 1995, Heath contributed $45,000 cash and 3,000 shares of its $10 par value common stock to the ESOP. On this date, the market price of the stock was $18 a share.
   • On October 1, 1995, the ESOP borrowed $100,000 from Union National Bank and acquired 6,000 shares of Heath’s common stock in the open market at $17 a share. The note is for one year, bears interest at 10%, and is guaranteed by Heath.
   • On December 15, 1995, the ESOP distributed 8,000 shares of Heath’s common stock to employees of Heath in accordance with the plan formula. On this date, the market price of the stock was $20 a share.

In its 1995 income statement, what amount should Heath report as compensation expense relating to the ESOP?
   a. $99,000
   b. $155,000
   c. $199,000
   d. $259,000

WHAT IS CASH?

36. On December 31, 1998, West Company had the following cash balances:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash in banks</td>
<td>$1,800,000</td>
</tr>
<tr>
<td>Petty cash funds (all funds were reimbursed on 12/31/98)</td>
<td>50,000</td>
</tr>
</tbody>
</table>

Cash in banks includes $600,000 of compensating balances against short-term borrowing arrangements at December 31, 1998. The compensating balances are not legally restricted as to withdrawal by West. In the current assets section of West's December 31, 1998, balance sheet, what total amount should be reported as cash?
   a. $1,200,000
   b. $1,250,000
   c. $1,800,000
   d. $1,850,000

BANK RECONCILIATIONS

37. Poe, Inc., had the following bank reconciliation at March 31, 1997:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance per bank statement, 3/31/97</td>
<td>$46,500</td>
</tr>
<tr>
<td>Add deposit in transit</td>
<td>10,300</td>
</tr>
<tr>
<td>Less outstanding checks</td>
<td>12,600</td>
</tr>
<tr>
<td>Balance per books, 3/31/97</td>
<td>$44,200</td>
</tr>
</tbody>
</table>

Data per bank for the month of April 1997 follow:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposits</td>
<td>$58,400</td>
</tr>
<tr>
<td>Disbursements</td>
<td>49,700</td>
</tr>
</tbody>
</table>

All reconciling items at March 31, 1997, cleared the bank in April. Outstanding checks at April 30, 1997, totaled $7,000. There were no deposits in transit at April 30, 1997. What is the cash balance per books at April 30, 1997?
   a. $48,200
   b. $52,900
   c. $55,200
   d. $58,500

FRANCHISES

38. On December 31, 1997, Rice, Inc., authorized Graf to operate as a franchisee for an initial franchise fee of $150,000. Of this amount, $60,000 was received upon signing the agreement and the balance,
represented by a note, is due in three annual payments of $30,000 each beginning December 31, 1998. The present value on December 31, 1997, of the three annual payments appropriately discounted is $72,000. According to the agreement, the nonrefundable down payment represents a fair measure of the services already performed by Rice; however, substantial future services are required of Rice. Collectibility of the note is reasonably certain. In Rice's December 31, 1997, balance sheet, unearned franchise fees from Graf's franchise should be reported as
a. $132,000
b. $100,000
c. $90,000
d. $72,000

39. On January 2, 1995, Rex Enterprises, Inc., authorized Adam Company to operate as a franchise over a 20-year period for an initial franchise fee of $60,000 received on signing the agreement. Adam started operations on June 30, 1995, by which date Rex had performed all of the required initial services. In its income statement for the six months ended June 30, 1995, what amount should Rex report as revenue from franchise fees in connection with Adam's franchise?
   a. $0
   b. $1,500
   c. $30,000
   d. $60,000

40. On July 1, 1993, Hart signed an agreement to operate as a franchisee of Ace Printers for an initial franchise fee of $120,000. The same date, Hart paid $40,000 and agreed to pay the balance in four equal annual payments of $20,000 beginning July 1, 1994. The down payment is not refundable and no future services are required of the franchiser. Hart can borrow at 14% for a loan of this type. Present and future value factors are as follows:

Present value of 1 at 14% for 4 periods 0.59
Future amount of 1 at 14% for 4 periods 1.69
Present value of an ordinary annuity of 1 at 14% for 4 periods 2.91

Hart should record the acquisition cost of the franchise on July 1, 1993, at
a. $135,200
b. $120,000
c. $98,200
d. $87,200

TIMING OF REVENUE/EXPENSE

41. On October 1, 1998, Acme Fuel Co. sold 100,000 gallons of heating oil to Karn Co. at $3 per gallon. Fifty thousand gallons were delivered on December 15, 1998, and the remaining 50,000 gallons were delivered on January 15, 1999. Payment terms were: 50% due on October 1, 1998, 25% due on first delivery, and the remaining 25% due on second delivery. What amount of revenue should Acme recognize from this sale during 1998?
   a. $75,000
   b. $150,000
   c. $225,000
   d. $300,000

42. In 1997, Super Comics Corp. sold a comic strip to Fantasy, Inc. and will receive royalties of 20% of future revenues associated with the comic strip. At December 31, 1998, Super reported royalties receivable of $75,000 from Fantasy. During 1999, Super received royalty payments of $200,000. Fantasy reported revenues of $1,500,000 in 1999 from the comic strip. In its 1999 income statement, what amount should Super report as royalty revenue?
   a. $125,000
   b. $175,000
   c. $200,000
   d. $300,000

43. Beal Company sells contracts agreeing to service equipment for a three-year period. Information for the year ended December 31, 1992, is as follows:

Cash receipts from service contracts sold $960,000
Service contract revenue recognized 780,000
Unearned service contract revenue, 1/1/92 570,000

In its December 31, 1992, balance sheet, what amount should Beal report as unearned service contract revenue?
   a. $390,000
   b. $510,000
   c. $640,000
   d. $750,000
44. On February 12, 1999, VIP Publishing, Inc. purchased the copyright to a book for $15,000 and agreed to pay royalties equal to 10% of book sales, with a guaranteed minimum royalty of $60,000. VIP had book sales of $800,000 in 1999. In its 1999 income statement, what amount should VIP report as royalty expense?
   a. $60,000 
   b. $75,000 
   c. $80,000 
   d. $95,000 

45. A state requires quarterly sales tax returns to be filed with the sales tax bureau by the 20th day following the end of the calendar quarter. However, the state further requires that sales taxes collected be remitted to the sales tax bureau by the 20th day of the month following any month such collections exceed $500. These payments can be taken as credits on the quarterly sales tax return.

Taft Corp. operates a retail hardware store. All items are sold subject to a 6% state sales tax, which Taft collects and records as sales revenue. The sales taxes paid by Taft are charged against sales revenue. Taft pays the sales taxes when they are due.

Following is a monthly summary appearing in Taft's first quarter 1996 sales revenue account:

<table>
<thead>
<tr>
<th></th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>$</td>
<td>$10,600</td>
</tr>
<tr>
<td>February</td>
<td>600</td>
<td>7,420</td>
</tr>
<tr>
<td>March</td>
<td></td>
<td>9,540</td>
</tr>
<tr>
<td></td>
<td>$600</td>
<td>$27,560</td>
</tr>
</tbody>
</table>

In its financial statements for the quarter ended March 31, 1996, Taft's sales revenue and sales taxes payable would be

<table>
<thead>
<tr>
<th>Sales revenue</th>
<th>Sales taxes payable</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $27,560</td>
<td>$1,560</td>
</tr>
<tr>
<td>b. $26,960</td>
<td>$600</td>
</tr>
<tr>
<td>c. $26,000</td>
<td>$1,560</td>
</tr>
<tr>
<td>d. $26,000</td>
<td>$960</td>
</tr>
</tbody>
</table>

46. At December 31, 2004, Ashe Co. had a $990,000 balance in its advertising expense account before any year-end adjustments relating to the following:
   - Radio advertising spots broadcast during December 2004 were billed to Ashe on January 4, 2005. The invoice cost of $50,000 was paid on January 15, 2005.
   - Included in the $990,000 is $60,000 for newspaper advertising for a January 2005 sales promotional campaign.

Ashe's advertising expense for the year ended December 31, 2004, should be
   a. $930,000
   b. $980,000
   c. $1,000,000
   d. $1,040,000

**CASH VS. ACCRUAL**

47. On April 1, 2000, Ivy began operating a service proprietorship with an initial cash investment of $1,000. The proprietorship provided $3,200 of services in April and received full payment in May. The proprietorship incurred expenses of $1,500 in April which were paid in June. During May, Ivy drew $500 against her capital account.

What was the proprietorship's income for the two months ended May 31, 2000, under the following methods of accounting?

<table>
<thead>
<tr>
<th></th>
<th>Cash-basis</th>
<th>Accrual-basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>$1,200</td>
<td>$1,200</td>
</tr>
<tr>
<td>b.</td>
<td>$1,700</td>
<td>$1,700</td>
</tr>
<tr>
<td>c.</td>
<td>$2,700</td>
<td>$1,200</td>
</tr>
<tr>
<td>d.</td>
<td>$3,200</td>
<td>$1,700</td>
</tr>
</tbody>
</table>
48. Reid Partners, Ltd., which began operations on January 1, 1997, has elected to use cash-basis accounting for tax purposes and accrual-basis accounting for its financial statements. Reid reported sales of $175,000 and $80,000 in its tax returns for the years ended December 31, 1998 and 1997, respectively. Reid reported accounts receivable of $30,000 and $50,000 in its balance sheets as of December 31, 1998 and 1997, respectively. What amount should Reid report as sales in its income statement for the year ended December 31, 1998?
   a. $145,000  
   b. $155,000  
   c. $195,000  
   d. $205,000

49. Class Corp. maintains its accounting records on the cash basis but restates its financial statements to the accrual method of accounting. Class had $60,000 in cash-basis pretax income for 1999. The following information pertains to Class’s operations for the years ended December 31, 1999 and 1998:

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$40,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>15,000</td>
<td>30,000</td>
</tr>
</tbody>
</table>

Under the accrual method, what amount of income before taxes should Class report in its December 31, 1999 income statement?
   a. $25,000  
   b. $55,000  
   c. $65,000  
   d. $95,000

**OTHER BASES OF ACCOUNTING**

50. Which of the following accounting bases may be used to prepare financial statements in conformity with a comprehensive basis of accounting other than generally accepted accounting principles?

I. Basis of accounting used by an entity to file its income tax return.
   a. I only.
   b. II only.
   c. Both I and II.
   d. Neither I nor II.

II. Cash receipts and disbursements basis of accounting.

51. Personal financial statements usually consist of
   b. A statement of net worth, an income statement, and a statement of changes in net worth.
   c. A statement of financial condition and a statement of changes in net worth.
   d. A statement of financial condition, a statement of changes in net worth, and a statement of cash flows.

52. Personal financial statements should report assets and liabilities at
   a. Estimated current values at the date of the financial statements and, as additional information, at historical cost.
   b. Estimated current values at the date of the financial statements.
   c. Historical cost and, as additional information, at estimated current values at the date of the financial statements.
   d. Historical cost.

53. A business interest that constitutes a large part of an individual's total assets should be presented in a personal statement of financial condition as
   a. A single amount equal to the proprietorship equity.
   b. A single amount equal to the estimated current value of the business interest.
   c. A separate listing of the individual assets and liabilities, at cost.
   d. Separate line items of both total assets and total liabilities, at cost.

54. The following information pertains to an insurance policy that Barton owns on his life:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Face amount</td>
<td>$100,000</td>
<td></td>
</tr>
<tr>
<td>Accumulated premiums paid up to December 31, 1998</td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td>Cash value at December 31, 1998</td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td>Policy loan</td>
<td>3,000</td>
<td></td>
</tr>
</tbody>
</table>

In Barton’s personal statement of financial condition at December 31, 1998, what amount should be reported for the investment in life insurance?
   a. $97,000  
   b. $12,000  
   c. $9,000   
   d. $8,000
55. In personal financial statements, how should estimated income taxes on the excess of the estimated current values of assets over their tax bases be reported in the statement of financial condition?
   a. As liabilities.
   b. As deductions from the related assets.
   c. Between liabilities and net worth.
   d. In a footnote disclosure only.

56. For the purpose of estimating income taxes to be reported in personal financial statements, assets and liabilities measured at their tax bases should be compared to assets and liabilities measured at their

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Estimated current value</td>
<td>Estimated current amount</td>
</tr>
<tr>
<td>b. Historical cost</td>
<td>Historical cost</td>
</tr>
<tr>
<td>c. Estimated current value</td>
<td>Historical cost</td>
</tr>
<tr>
<td>d. Historical cost</td>
<td>Estimated current amount</td>
</tr>
</tbody>
</table>

57. Shea, a calendar-year taxpayer, is preparing a personal statement of financial condition as of April 30, 1999. Shea’s 1998 income tax liability was paid in full on April 15, 1999. Shea’s tax on income earned from January through April 1999 is estimated at $30,000. In addition, $25,000 is estimated for income tax on the differences between the estimated current values of Shea’s assets and the current amounts of liabilities and their tax bases at April 30, 1999. No withholdings or payments have been made towards the 1999 income tax liability. In Shea’s statement of financial condition at April 30, 1999, what is the total of the amount or amounts that should be reported for income taxes?
   a. $0
   b. $25,000
   c. $30,000
   d. $55,000

58. Dale Hall's holdings at December 31, 1996, included the following:
   - 5,000 shares of Arno Corp. common stock purchased in 1991 for $85,000. The market value of the stock was $120,000 at December 31, 1996.
   - A life insurance policy with a cash value of $50,000 at December 31, 1996.

In Hall's December 31, 1996, personal statement of financial condition, the above items should be reported at
   a. $170,000
   b. $135,000
   c. $120,000
   d. $85,000

**REVIEW QUESTIONS**

59. Wren Co. sells equipment on installment contracts. Which of the following statements best justifies Wren's use of the cost recovery method of revenue recognition to account for these installment sales?
   a. The sales contract provides that title to the equipment only passes to the purchaser when all payments have been made.
   b. No cash payments are due until one year from the date of sale.
   c. Sales are subject to a high rate of return.
   d. There is no reasonable basis for estimating collectibility.

60. Gow Constructors, Inc., has consistently used the percentage-of-completion method of recognizing income. In 1996, Gow started work on an $18,000,000 construction contract that was completed in 1997. The following information was taken from Gow's 1996 accounting records:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress billings</td>
<td>$6,600,000</td>
</tr>
<tr>
<td>Costs incurred</td>
<td>5,400,000</td>
</tr>
<tr>
<td>Collections</td>
<td>4,200,000</td>
</tr>
<tr>
<td>Estimated costs to complete</td>
<td>10,800,000</td>
</tr>
</tbody>
</table>

What amount of gross profit should Gow have recognized in 1996 on this contract?
   a. $1,400,000
   b. $1,200,000
   c. $900,000
   d. $600,000

61. Cash collection is a critical event for income recognition in the

<table>
<thead>
<tr>
<th>Cost-recovery method</th>
<th>Installment method</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
62. Compared to the accrual basis of accounting, the cash basis of accounting understates income by the net decrease during the accounting period of

<table>
<thead>
<tr>
<th>Accounts receivable</th>
<th>Accrued expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
</tr>
<tr>
<td>d. No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

63. At the end of 1996, Ritzcar Co. failed to accrue sale commissions earned during 1996 but paid in 1997. The error was not repeated in 1997. What was the effect of this error on 1996 ending working capital and on the 1997 ending retained earnings balance?

<table>
<thead>
<tr>
<th>1996 ending</th>
<th>1997 ending</th>
</tr>
</thead>
<tbody>
<tr>
<td>working capital</td>
<td>retained earnings</td>
</tr>
<tr>
<td>a. Overstated</td>
<td>Overstated</td>
</tr>
<tr>
<td>b. No effect</td>
<td>Overstated</td>
</tr>
<tr>
<td>c. No effect</td>
<td>No effect</td>
</tr>
<tr>
<td>d. Overstated</td>
<td>No effect</td>
</tr>
</tbody>
</table>

64. On July 1, 2000, Ran County issued realty tax assessments for its fiscal year ended June 30, 2001. On September 1, 2000, Day Co. purchased a warehouse in Ran County. The purchase price was reduced by a credit for accrued realty taxes. Day did not record the entire year's real estate tax obligation, but instead recorded tax expenses at the end of each month by adjusting prepaid real estate taxes or real estate taxes payable, as appropriate. On November 1, 2000, Day paid the first of two equal installments of $12,000 for realty taxes. What amount of this payment should Day record as a debit to real estate taxes payable?

| a. $ 4,000 |
| b. $8,000 |
| c. $10,000 |
| d. $12,000 |

65. For $50 a month, Rawl Co. visits its customers' premises and performs insect control services. If customers experience problems between regularly scheduled visits, Rawl makes service calls at no additional charge. Instead of paying monthly, customers may pay an annual fee of $540 in advance. For a customer who pays the annual fee in advance, Rawl should recognize the related revenue

a. When the cash is collected.
b. At the end of the fiscal year.
c. At the end of the contract year after all of the services have been performed.
d. Evenly over the contract year as the services are performed.

66. Black Co. requires advance payments with special orders for machinery constructed to customer specifications. These advances are nonrefundable. Information for 2000 is as follows:

| Customer advances-balance 12/31/99 | $ 118,000 |
| Advances received with orders in 2000 | 184,000 |
| Advances applied to orders shipped in 2000 | 164,000 |
| Advances applicable to orders canceled in 2000 | 50,000 |

In Black's December 31, 2000, balance sheet, what amount should be reported as a current liability for advances from customer?

| a. $0 |
| b. $88,000 |
| c. $138,000 |
| d. $148,000 |

67. Ward, a consultant, keeps her accounting records on a cash basis. During 2001, Ward collected $200,000 in fees from clients. At December 31, 2000, Ward had accounts receivable of $40,000. At December 31, 2001, Ward had accounts receivable of $60,000, and unearned fees of $5,000. On an accrual basis, what was Ward's service revenue for 2001?

| a. $175,000 |
| b. $180,000 |
| c. $215,000 |
| d. $225,000 |

68. Which of the following is used in calculating the income recognized in the fourth and final year of a contract accounted for by the percentage-of-completion method?

<table>
<thead>
<tr>
<th>Actual total costs</th>
<th>Income previously recognized</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>
69. According to the installment method of accounting, gross profit on an installment sale is recognized in income:
   a. On the date of sale.
   b. On the date the final cash collection is received.
   c. In proportion to the cash collection.
   d. After cash collections equal to the cost of sales have been received.

70. Under a royalty agreement with another company, Wand Co. will pay royalties for the assignment of a patent for three years. The royalties paid should be reported as expense:
   a. In the period paid.
   b. In the period incurred.
   c. At the date the royalty agreement began.
   d. At the date the royalty agreement expired.

71. Leslie Shaw's personal statement of financial condition at December 31, 1993, shows net worth of $400,000 before consideration of employee stock options owned on that date. Information relating to the stock options is as follows:
   - Options to purchase 10,000 shares of Korn Corporation stock.
   - Option exercise price is $10 a share.
   - Options expire on June 30, 1995.
   - Market price of the stock is $25 a share on December 31, 1993.
   - Assume that exercise of the options in 1994 would result in ordinary income taxable at 35%.

After giving effect to the stock options, Shaw's net worth at December 31, 1993, would be:
   a. $497,500
   b. $550,000
   c. $562,500
   d. $650,000

72. Each of Potter Pie Co.'s 21 new franchisees contracted to pay an initial franchise fee of $30,000. By December 31, 1998, each franchisee had paid a non-refundable $10,000 fee and signed a note to pay $10,000 principal plus the market rate of interest on

73. A company uses the completed-contract method to account for a long-term construction contract. Revenue is recognized when progress billings are recorded and collected.

<table>
<thead>
<tr>
<th>Recorded</th>
<th>Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>No</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

74. On January 1, 1998, Sip Co. signed a 5-year contract enabling it to use a patented manufacturing process beginning in 1998. A royalty is payable for each product produced, subject to a minimum annual fee. Any royalties in excess of the minimum will be paid annually. On the contract date, Sip prepaid a sum equal to two years' minimum annual fees. In 1998, only minimum fees were incurred. The royalty prepayment should be reported in Sip’s December 31, 1998, financial statements as:
   a. An expense only.
   b. A current asset and an expense.
   c. A current asset and noncurrent asset.
   d. A noncurrent asset.

75. Bren Co.'s beginning inventory at January 1, 2000, was understated by $26,000, and its ending inventory was overstated by $52,000. As a result, Bren's cost of goods sold for 2000 was:
   a. Understated by $26,000.
   b. Overstated by $26,000.
   c. Understated by $78,000.
   d. Overstated by $78,000.
Items 76 and 77 are based on the following:

Baker Co. is a real estate developer that began operations on January 2, 1997. Baker appropriately uses the installment method of revenue recognition. Baker’s sales are made on the basis of a 10% downpayment, with the balance payable over 30 years. Baker’s gross profit percentage is 40%. Relevant information for Baker’s first two years of operations is as follows:

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$16,000,000</td>
<td>$14,000,000</td>
</tr>
<tr>
<td>Cash collections</td>
<td>2,020,000</td>
<td>1,400,000</td>
</tr>
</tbody>
</table>

76. At December 31, 1997, Baker’s deferred gross profit was
a. $5,040,000
b. $5,600,000
c. $8,400,000
d. $12,600,000

77. Baker’s realized gross profit for 1998 was
a. $6,400,000
b. $2,020,000
c. $1,212,000
d. $808,000

78. Since there is no reasonable basis for estimating the degree of collectibility, Astor Co. uses the installment method of revenue recognition for the following sales:

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$900,000</td>
<td>$600,000</td>
</tr>
<tr>
<td>Collections from:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999 sales</td>
<td>100,000</td>
<td>200,000</td>
</tr>
<tr>
<td>2000 sales</td>
<td>300,000</td>
<td>----</td>
</tr>
<tr>
<td>Accounts written off:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999 sales</td>
<td>150,000</td>
<td>50,000</td>
</tr>
<tr>
<td>2000 sales</td>
<td>50,000</td>
<td>----</td>
</tr>
<tr>
<td>Gross profit percentage</td>
<td>40%</td>
<td>30%</td>
</tr>
</tbody>
</table>

What amount should Astor report as deferred gross profit in its December 31, 2000, balance sheet for the 1999 and 2000 sales?

a. $150,000.
b. $160,000.
c. $225,000.
d. $250,000.

79. Clint owns 50% of Vohl Corp.’s common stock. Clint paid $20,000 for this stock in 1993. At December 31, 1998, Clint’s 50% stock ownership in Vohl had a fair value of $180,000. Vohl’s cumulative net income and cash dividends declared for the five years ended December 31, 1998, were $300,000 and $40,000, respectively. In Clint’s personal statement of financial condition at December 31, 1998, what amount should be shown as the investment in Vohl?

a. $20,000
b. $150,000
c. $170,000
d. $180,000

80. On January 1, 20X6, Pall Corp. granted stock options to key employees for the purchase of 40,000 shares of the company’s common stock at $25 per share. The options are intended to compensate employees for the next two years. The options are exercisable within a four-year period beginning January 1, 20X8, by the grantees still in the employ of the company. No options were terminated during 20X6, but the company does have an experience of 4% forfeitures over the life of the stock options. The market price of the common stock was $32 per share at the date of the grant. Pall Corp. used the Binomial pricing model and estimated the fair value of each of the options at $10. What amount should Pall charge to compensation expense for the year ended December 31, 20X6?

a. $160,000
b. $200,000
c. $192,000
d. $153,600

81. In preparing its bank reconciliation at December 31, 1994, Case Company has available the following data:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance per bank statement, 12/31/94</td>
<td>$38,075</td>
</tr>
<tr>
<td>Deposit in transit, 12/31/94</td>
<td>5,200</td>
</tr>
<tr>
<td>Outstanding checks, 12/31/94</td>
<td>6,750</td>
</tr>
<tr>
<td>Amount erroneously credited by bank to Case's account, 12/28/94</td>
<td>400</td>
</tr>
<tr>
<td>Bank service charges for December</td>
<td>75</td>
</tr>
</tbody>
</table>

Case's adjusted cash in bank balance at December 31, 1994, is

a. $36,525
b. $36,450
c. $36,125
d. $36,050
82. On January 2, 1999, Yardley Co. sold a plant to Ivory, Inc. for $1,500,000. On that date, the plant’s carrying cost was $1,000,000. Ivory gave Yardley $300,000 cash and a $1,200,000 note, payable in 4 annual installments of $300,000 plus 12% interest. Ivory made the first principal and interest payment of $444,000 on December 31, 1999. Yardley uses the installment method of revenue recognition. In its 1999 income statement, what amount of realized gross profit should Yardley report?

a. $344,000  
b. $200,000  
c. $148,000  
d. $100,000  

83. On April 30, 1997, White sold land with a book value of $600,000 to Smith for its fair value of $800,000. Smith gave White a 12%, $800,000 note secured only by the land. At the date of sale, Smith was in a very poor financial position and its continuation as a going concern was very questionable. White should

a. Use the cost recovery method of accounting.  
b. Record the note at its discounted value.  
c. Record a $200,000 gain on the sale of the land.  
d. Fully reserve the note.  

84. Jen has been employed by Komp, Inc. since February 1, 1996. Jen is covered by Komp’s Section 401(k) deferred compensation plan. Jen’s contributions have been 10% of salaries. Komp has made matching contributions of 5%. Jen’s salaries were $21,000 in 1996, $23,000 in 1997, and $26,000 in 1998. Employer contributions vest after an employee completes three years of continuous employment. The balance in Jen’s 401(k) account was $11,900 at December 31, 1998, which included earnings of $1,200 on Jen’s contributions. What amount should be reported for Jen’s vested interest in the 401(k) plan in Jen’s December 31, 1998, personal statement of financial condition?

a. $11,900  
b. $8,200  
c. $7,000  
d. $1,200  

85. Zach Corp. pays commissions to its sales staff at the rate of 3% of net sales. Sales staff are not paid salaries but are given monthly advances of $15,000. Advances are charged to commission expense, and reconciliations against commissions are prepared quarterly. Net sales for the year ended March 31, 1999, were $15,000,000. The unadjusted balance in the commissions expense account on March 31, 1999, was $400,000. March advances were paid on April 3, 1999. In its income statement for the year ended March 31, 1999, what amount should Zach report as commission expense?

a. $465,000  
b. $450,000  
c. $415,000  
d. $400,000  

86. The estimated current values of Lane’s personal assets at December 31, 1997, totaled $1,000,000, with tax bases aggregating $600,000. Included in these assets was a vested interest in a deferred profit-sharing plan with a current value of $80,000 and a tax basis of $70,000. The estimated current amounts of Lane’s personal liabilities equaled their tax bases at December 31, 1997. Lane's 1997 effective income tax rate was 30%. In Lane's personal statement of financial condition at December 31, 1997, what amount should be provided for estimated income taxes relating to the excess of current values over tax bases?

a. $120,000  
b. $117,000  
c. $3,000  
d. $0  

87. Luge Co., which began operations on January 2, 1999, appropriately uses the installment sales method of accounting. The following information is available for 1999:

Installment accounts receivable, December 31, 1999 $800,000  
Deferred gross profit, December 31, 1992 (before recognition of realized gross profit for 1999) 560,000  
Gross profit on sales 40%  

For the year ended December 31, 1999, cash collections and realized gross profit on sales should be

<table>
<thead>
<tr>
<th>Cash collections</th>
<th>Realized gross profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $400,000</td>
<td>$320,000</td>
</tr>
<tr>
<td>b. $400,000</td>
<td>$240,000</td>
</tr>
<tr>
<td>c. $600,000</td>
<td>$320,000</td>
</tr>
<tr>
<td>d. $600,000</td>
<td>$240,000</td>
</tr>
</tbody>
</table>
88. A company uses the completed-contract method to account for a four-year construction contract which is presently in its third year. Progress billings were recorded and collected in the third year. Based on events occurring in the third year, there is now an anticipated loss on the contract. When would the effect of each of the following be reported in the company's income statement?

<table>
<thead>
<tr>
<th></th>
<th>Third year</th>
<th>Anticipated loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Not third year</td>
<td>Third year</td>
</tr>
<tr>
<td>b.</td>
<td>Not third year</td>
<td>Fourth year</td>
</tr>
<tr>
<td>c.</td>
<td>Third year</td>
<td>Third year</td>
</tr>
<tr>
<td>d.</td>
<td>Third year</td>
<td>Fourth year</td>
</tr>
</tbody>
</table>

89. Pie Co. uses the installment sales method to recognize revenue. Customers pay the installment notes in 24 equal monthly amounts, which include 12% interest. What is an installment note’s receivable balance six months after the sale?

a. 75% of the original sales price.
b. Less than 75% of the original sales price.
c. The present value of the remaining monthly payments discounted at 12%.
d. Less than the present value of the remaining monthly payments discounted at 12%.

90. Moran is preparing a personal statement of financial condition as of April 30, 1998. Included in Moran's assets are the following:

- 50% of the voting stock of Crow Corp. A stockholders' agreement restricts the sale of the stock and, under certain circumstances, requires Crow to repurchase the stock based on carrying amounts of net assets plus an agreed amount for goodwill. At April 30, 1998, the buyout value of this stock is $337,500. Moran's tax basis for the stock is $215,000.

- Jewelry with a fair value aggregating $35,000 based on an independent appraisal on April 30, 1998, for insurance purposes. This jewelry was acquired by purchase and gift over a 10-year period and has a total tax basis of $20,000.

At what total amount should the Crow stock and jewelry be reported in Moran's April 30, 1998, personal statement of financial condition?

a. $372,500
b. $357,500
c. $250,000
d. $235,000

91. Wren Corp.'s trademark was licensed to Mont Co. for royalties of 15% of sales of the trademarked items. Royalties are payable semi-annually on March 15 for sales in July through December of the prior year, and on September 15 for sales in January through June of the same year. Wren received the following royalties from Mont:

<table>
<thead>
<tr>
<th>March 15</th>
<th>September 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>$10,000</td>
</tr>
<tr>
<td>2000</td>
<td>12,000</td>
</tr>
</tbody>
</table>

Mont estimated that sales of the trademarked items would total $60,000 for July through December 2000.

In Wren's 2000 income statement, the royalty revenue should be

a. $26,000
b. $29,000
c. $38,000
d. $41,000

92. Adam Co. reported sales revenue of $2,300,000 in its income statement for the year ended December 31, 1996. Additional information was as follows:

<table>
<thead>
<tr>
<th>Accounts receivable</th>
<th>12/31/95</th>
<th>12/31/96</th>
</tr>
</thead>
<tbody>
<tr>
<td>$500,000</td>
<td>$650,000</td>
<td></td>
</tr>
</tbody>
</table>

Allowance for uncollectible accounts

(30,000) (55,000)

Uncollectible accounts totaling $10,000 were written off during 1996. Under the cash basis of accounting, Adam would have reported 1996 sales of

a. $2,140,000
b. $2,150,000
c. $2,175,000
d. $2,450,000
93. State Co. recognizes construction revenue and expenses using the percentage-of-completion method. During 1996, a single long-term project was begun, which continued through 1997. Information on the project follows:

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable from construction contract</td>
<td>$100,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Construction expenses</td>
<td>105,000</td>
<td>192,000</td>
</tr>
<tr>
<td>Construction in progress</td>
<td>122,000</td>
<td>364,000</td>
</tr>
<tr>
<td>Partial billings on contract</td>
<td>100,000</td>
<td>420,000</td>
</tr>
</tbody>
</table>

Profit recognized from the long-term construction contract in 1997 should be
a. $50,000
b. $108,000
c. $128,000
d. $228,000

94. The bookkeeper of Latsch Company, which has an accounting year ending December 31, made the following errors:

- A $1,000 collection from a customer was received on December 29, 1999, but not recorded until the date of its deposit in the bank, January 4, 2000.
- A supplier's $1,600 invoice for inventory items received in December 1999 was not recorded until January 2000. (Inventories at December 31, 1999 and 2000, were stated correctly, based on physical count.)
- Depreciation for 1999 was understated by $900.
- In September 1999, a $200 invoice for office supplies was charged to the Utilities Expense account. Office supplies are expensed as purchased.
- December 31, 1999, sales on account of $3,000 were recorded in January 2000.

Assume that no other errors have occurred and that no correcting entries have been made. **Ignore income taxes.**

Net income for 1999 was
a. Understated by $500.
b. Understated by $2,100.
c. Overstated by $2,500.
d. Neither understated nor overstated.

95. Assume the same facts as above. Working capital at December 31, 1999, was
a. Understated by $3,000.
b. Understated by $500.
c. Understated by $1,400.
d. Neither understated or overstated.

96. Assume the same facts as above. Total assets at December 31, 1999, were
a. Overstated by $2,500.
b. Overstated by $2,100.
c. Understated by $2,500.
d. None of the above.

**Recently Disclosed Multiple Choice Questions**

97. Troop Co. frequently borrows from the bank to maintain sufficient operating cash. The following loans were at a 12% interest rate, with interest payable at maturity. Troop repaid each loan on its scheduled maturity date.

<table>
<thead>
<tr>
<th>Date of Loan</th>
<th>Amount</th>
<th>Maturity Date</th>
<th>Term of Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/1/95</td>
<td>$10,000</td>
<td>10/31/96</td>
<td>1 year</td>
</tr>
<tr>
<td>2/1/96</td>
<td>30,000</td>
<td>7/31/96</td>
<td>6 months</td>
</tr>
<tr>
<td>5/1/96</td>
<td>16,000</td>
<td>1/31/97</td>
<td>9 months</td>
</tr>
</tbody>
</table>

Troop records interest expense when the loans are repaid. Accordingly, interest expense of $3,000 was recorded in 1996. If no correction is made, by what amount would 1996 interest expense be understated?

a. $1,080
b. $1,240
c. $1,280
d. $1,440

98. Which statements are usually included in a set of personal financial statements?

a. A statement of net worth and an income statement.
b. A statement of financial condition and a statement of changes in net worth.
c. A statement of net worth, an income statement, and a statement of cash flows.
d. A statement of financial condition, a statement of changes in net worth, and a statement of cash flows.
99. At May 31, 1997, Quay owned a $10,000 whole-life insurance policy with a cash-surrender value of $4,500, net of loans of $2,500. In Quay's May 31, 1997 personal statement of financial condition, what amount should be reported as investment in life insurance?
   a. $4,500
   b. $7,000
   c. $7,500
   d. $10,000

100. Which of the following is not a comprehensive basis of accounting other than generally accepted accounting principles?
   a. Cash receipts and disbursements basis of accounting.
   b. Basis of accounting used by an entity to file its income tax return.
   c. Basis of accounting used by an entity to comply with the financial reporting requirements of a government regulatory agency.
   d. Basis of accounting used by an entity to comply with the financial reporting requirements of a lending institution.

101. Bear Co., which began operations on January 2, 1997, appropriately uses the installment sales method of accounting. The following information is available for 1997:

| Installment sales               | $1,400,000 |
| Realized gross profit on installation sales | 240,000 |
| Gross profit percentage on sales | 40%       |

For the year ended December 31, 1997, what amounts should Bear report as accounts receivable and deferred gross profit?

<table>
<thead>
<tr>
<th>Accounts receivable</th>
<th>Deferred gross profits</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $600,000</td>
<td>$320,000</td>
</tr>
<tr>
<td>b. $600,000</td>
<td>$360,000</td>
</tr>
<tr>
<td>c. $800,000</td>
<td>$320,000</td>
</tr>
<tr>
<td>d. $800,000</td>
<td>$560,000</td>
</tr>
</tbody>
</table>

102. Hahn Co. prepared financial statements on the cash basis of accounting. The cash basis was modified so that an accrual of income taxes was reported. Are these financial statements in accordance with the modified cash basis of accounting?
   a. Yes.
   b. No, because the modifications are illogical.
   c. No, because there is no substantial support for recording income taxes.
   d. No, because the modifications result in financial statements equivalent to those prepared under the accrual basis of accounting.

103. Lew Co. sold 200,000 corrugated boxes for $2 each. Lew's cost was $1 per unit. The sales agreement gave the customer the right to return up to 60% of the boxes within the first six months, provided an appropriate reason was given. It was immediately determined, with appropriate reason, that 5% of the boxes would be returned. Lew absorbed an additional $10,000 to process the returns and expects to resell the boxes. What amount should Lew report as operating profit from this transaction?
   a. $170,000
   b. $179,500
   c. $180,000
   d. $200,000

104. Green, a calendar-year taxpayer, is preparing a personal statement of financial condition as of April 30, 2001. Green’s 2000 income tax liability was paid in full on April 15, 2001. Green’s tax on income earned between January and April 2001 is estimated at $20,000. In addition, $40,000 is estimated for income tax on the differences between the estimated current values and current amounts of Green’s assets and liabilities and their tax bases at April 30, 2001. No withholdings or payments have been made towards the 2001 income tax liability. In Green’s April 30, 2001, statement of financial condition, what amount should be reported, between liabilities and net worth, as estimated income taxes?
   a. $0
   b. $20,000
   c. $40,000
   d. $60,000
105. Income tax-basis financial statements differ from those prepared under GAAP in that income tax-basis financial statements
a. Do not include nontaxable revenues and nondeductible expenses in determining income.
b. Include detailed information about current and deferred income tax liabilities.
c. Contain no disclosures about capital and operating lease transactions.
d. Recognize certain revenues and expenses in different reporting periods.

106. On January 2, 2003, Boulder Co. assigned its patent to Castle Co. for royalties of 10% of patent-related sales. The assignment is for the remaining four years of the patent's life. Castle guaranteed Boulder a minimum royalty of $100,000 over the life of the patent and paid Boulder $50,000 against royalties during 2003. Patent-related sales for 2003 were $300,000. In its 2003 income statement, what amount should Boulder report as royalty revenue?

a. $25,000  
b. $30,000  
c. $50,000  
d. $100,000

107. Mint Co.'s cash balance in its balance sheet is $1300,000, of which $300,000 is identified as a compensating balance. In addition, Mint has classified cash of $250,000 that has been restricted for future expansion plans as "other assets". Which of the following should Mint disclose in notes to its financial statements?

<table>
<thead>
<tr>
<th>Compensating balance</th>
<th>Restricted cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

108. KLU Broadcast Co. entered into an agreement to exchange unsold advertising time for travel and lodging services with Hotel Co. As of June 30, travel and lodging services of $10,000 were used by KLU. However, the advertising service had not been provided. How should KLU account for travel and lodging in its June 30 financial statements?

a. Revenue and expense is recognized when the agreement is complete
b. An asset and revenue for $10,000 is recognized.
c. An expense and liability of $10,000 is recognized.
d. Not reported.

109. On December 30, Devlin Co. sold goods to Jensen Co. for $10,000 under an arrangement in which (1) Jensen has an unlimited right of return and (2) Jensen’s obligation to pay Devlin is contingent upon Jensen’s reselling the goods. Past experience has shown that Jensen ordinarily resells 60% of goods and returns the other 40%. What amount should Devlin include in sales revenue for this transaction on its December 31 income statement?

a. $10,000  
b. $6,000  
c. $4,000  
d. $0

110. North Co. entered into a franchise agreement with South Co. for an initial fee of $50,000. North received $10,000 at the agreement’s signing. The remaining balance was to be paid at a rate of $10,000 per year, beginning the following year. North’s services per the agreement were not complete in the current year. Operating activities will commence next year. What amount should North report as franchise revenue in the current year?

a. $0  
b. $10,000  
c. $20,000  
d. $50,000

111. At June 30, Almond Co.’s cash balance was $10,012 before adjustments, while its ending bank statement balance was $10,772. Check number 101 was issued June 2 in the amount of $95, but was erroneously recorded in Almond’s general ledger balance as $59. The check was correctly listed in the bank statement at $95, the bank statement also included a credit memo for interest earned in the amount of $35, and a debit memo for monthly service charges in the amount of $50. What was Almond’s adjusted cash balance at June 30?

a. $9,598  
b. $9,961  
c. $10,048  
d. $10,462

112. At the beginning of the current year, Hayworth Co. sold equipment with a two-year service contract for a single payment of $20,000. The fair value of the equipment was $18,000. Hayworth recorded this transaction with a debit of $20,000 to cash and a credit of $20,000 to sales revenue. Which of the following statements is correct regarding Hayworth’s current-year financial statements?

a. The financial statements are correct.
b. Net income will be overstated.
c. Total assets will be overstated.
d. Total liabilities will be overstated.
113. Asp Co. appropriately uses the installment method of revenue recognition to account for its credit sales. The following information was abstracted from Asp's December 31, Year 2, financial statements:

<table>
<thead>
<tr>
<th></th>
<th>Year 2</th>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$1,500,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Accounts receivable:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2 sales</td>
<td>900,000</td>
<td></td>
</tr>
<tr>
<td>Year 1 sales</td>
<td>540,000</td>
<td>600,000</td>
</tr>
<tr>
<td>Deferred gross profit:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2 sales</td>
<td>252,000</td>
<td></td>
</tr>
<tr>
<td>Year 1 sales</td>
<td>108,000</td>
<td>120,000</td>
</tr>
</tbody>
</table>

What was Asp's gross profit percentage for 2002 sales?
- a. 20%
- b. 25%
- c. 28%
- d. 40%

114. A company has the following accrual-basis balances at the end of its first year of operation:

- Unearned consulting fees $2,000
- Consulting fees receivable $3,500
- Consulting fee revenue $25,000

The company's cash-basis consulting revenue is what amount?
- a. $19,500
- b. $23,500
- c. $26,500
- d. $30,500

115. When would a company use the installment sales method of revenue recognition?
- a. When collectability of installment accounts receivable is reasonably predictable.
- b. When repossession of merchandise sold on the installment plan may result in a future gain or loss.
- c. When installment sales are material, and there is no reasonable basis for estimating collectability.
- d. When collection expenses and bad debts on installment accounts receivable are deemed to be immaterial.
Chapter Ten
Revenue and Expense Recognition, Miscellaneous Items Problems

NUMBER 1
The Deytyme Construction Company began operations January 1, 19X7. During the year, Deytyme entered into a contract with Redbeard Razor Corporation to construct a manufacturing facility. At that time, Deytyme estimated that it would take five years to complete the facility at a total cost of $4,800,000. The total contract price for construction of the facility is $6,000,000. During the year, Deytyme incurred $1,250,000 in construction costs related to the construction project. The estimated cost to complete the contract is $3,750,000. Redbeard was billed and paid 30% of the contract price.

Required:
Prepare schedules to compute the amount of gross profit to be recognized for the year ended December 31, 19X7, and the amount to be shown as "cost of uncompleted contract in excess of related billings" or "billings on uncompleted contract in excess of related costs" at December 31, 19X7, under each of the following methods:

2. Percentage-of-completion method.

Show supporting computations in good form.

NUMBER 2
The Maple Corporation sells farm machinery on the installment plan. On July 1, 19X9, Maple entered into an installment sale contract with Agriculture, Inc., for an eight-year period. Equal annual payments under the installment sale are $100,000 and are due on July 1. The first payment was made on July 1, 19X9.

Additional information is as follows:

- The amount that would be realized on an outright sale of similar farm machinery is $556,000.
- The cost of the farm machinery sold to Agriculture is $417,000.
- The finance charges relating to the installment period are $244,000 based on a stated interest rate of 12%, which is appropriate.
- Circumstances are such that the collection of the installments due under the contract is reasonably assured.

Required:
What income or loss before income taxes should Maple record for the year ended December 31, 19X9, as a result of the above transaction? Show supporting computations in good form.
NUMBER 3

After a two-year search for a buyer, Hobson, Inc., sold its idle plant facility to Jackson Company for $700,000 on January 1, 1997. On this date the plant had a depreciated cost on Hobson's books of $500,000. Under the agreement Jackson paid $100,000 cash on January 1, 1997, and signed a $600,000 note bearing interest at 10%. The note was payable in installments of $100,000, $200,000 and $300,000 on January 1, 1998, 1999 and 2000, respectively. The note was secured by a mortgage on the property sold. Hobson appropriately accounted for the sale under the cost recovery method since there was no reasonable basis for estimating the degree of collectibility of the note receivable. Jackson repaid the note with three late installment payments, which were accepted by Hobson, as follows:

<table>
<thead>
<tr>
<th>Date of payment</th>
<th>Principal</th>
<th>Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1, 1998</td>
<td>$100,000</td>
<td>$90,000</td>
</tr>
<tr>
<td>December 31, 1999</td>
<td>200,000</td>
<td>75,000</td>
</tr>
<tr>
<td>February 1, 2000</td>
<td>300,000</td>
<td>32,500</td>
</tr>
</tbody>
</table>

**Required:**
Prepare a schedule (using the format shown below) to record the initial transaction for the sale of the idle plant facility, the application of subsequent cash collections on the note, and the necessary journal entry on the date the transaction is complete.

<table>
<thead>
<tr>
<th>Date</th>
<th>Cash received</th>
<th>Note receivable</th>
<th>Idle plant (net)</th>
<th>Deferred income</th>
<th>Income recognized</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 1997</td>
<td>$100,000</td>
<td>Dr. (Cr.)</td>
<td>(Credit)</td>
<td>(Dr. Cr.)</td>
<td>(Credit)</td>
</tr>
<tr>
<td>July 1, 1998</td>
<td></td>
<td></td>
<td></td>
<td>(Dr. Cr.)</td>
<td></td>
</tr>
<tr>
<td>December 31, 1999</td>
<td>275,000</td>
<td>Dr. (Cr.)</td>
<td>(Credit)</td>
<td>(Dr. Cr.)</td>
<td></td>
</tr>
<tr>
<td>February 1, 2000</td>
<td>332,500</td>
<td>Dr. (Cr.)</td>
<td>(Credit)</td>
<td>(Dr. Cr.)</td>
<td></td>
</tr>
</tbody>
</table>

NUMBER 4

On July 1, 1998, Bow Construction Co. commenced operations and began constructing a building for Crecy under a fixed price contract. Anticipated completion date was June 15, 2000. Bow projects a large profit because it purchased most of the contract materials at exceptionally low prices in August 1998.

At the end of each month, Crecy is billed for completed work, for which it pays within 30 days. On December 31, 1999, all costs incurred exceed billings on the contract.

For the Crecy contract, Bow uses the percentage-of-completion (cost-to-cost) method for financial statement purposes. For income tax purposes, Bow qualifies for and uses the completed-contract method. Bow has no other contracts and no other differences between financial statement and income tax reporting.

**Required:**

a. How should Bow determine that the percentage-of-completion method is appropriate for the Crecy contract?
b. How should Bow calculate its 1999 income to be recognized on the Crecy contract? Explain any special treatment of unused material costs and why it is required.
c. Ignoring income tax effects, specify how the accounts related to the Crecy contract should be reported on Bow’s December 31, 1999, balance sheet.
d. Assuming Bow has elected early adoption of FASB Statement No. 109, *Accounting for Income Taxes*, what are the income tax effects of the Crecy contract on Bow’s 1999 balance sheet and income statement?
Chapter Ten
Solutions to Revenue and Expense Recognition, Miscellaneous Items Questions

1. (a) In order to use the percentage-of-completion method, both the estimated costs of completion and an estimate of the extent of completion must be reasonably dependable.

2. (c) The excess of cost of billings is a current asset, and the excess of billings over cost is a current liability.

3. (a) Since the contract is not yet complete, no gross profit is recognized in 1993.

4. (b) 

<table>
<thead>
<tr>
<th></th>
<th>1993 actual costs</th>
<th>$ 20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total estimated costs</td>
<td>$ 60,000</td>
<td>$ 33,333</td>
</tr>
<tr>
<td>Ratio</td>
<td>1/3</td>
<td></td>
</tr>
<tr>
<td>Contract price</td>
<td>× 100,000</td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>$ 33,333</td>
<td></td>
</tr>
<tr>
<td>1993 actual costs</td>
<td>– $ 20,000</td>
<td></td>
</tr>
<tr>
<td>Gross profit</td>
<td>$ 13,333</td>
<td></td>
</tr>
</tbody>
</table>

5. (b) Since the total cost of the contract, $3,100,000 ($930,000 + $2,170,000) is projected to exceed the contract price of $3,000,000, the excess cost of $100,000 must be recognized as a loss in 1997.

6. (d) Under the completed-contract method, revenues are not recognized until the year of completion. Therefore, in 1996, the entire contract price of $600,000 would be recognized as revenue and the costs incurred of $480,000 would be deducted in determining the gross profit of $120,000.

7. (c) 

| Current period's (first year) actual costs | $ 2,000,000 | = 12.5% |
| Total estimated costs                   | $ 16,000,000 |          |
| Revenue for 1996 = 12.5% × $20,000,000 = | $ 2,500,000 |          |
| Costs for 1996                          | $ 2,000,000  |          |
| Gross profit                            | $ 500,000    |          |

8. (a) Year-to-date income through 12/31/92:

| Revenues $6,300 ÷ 8,100 × $9,000,000 = | $7,000,000 |
| Costs 6,300,000                           |           |
| Income recognized through 12/31/92        | $700,000   |

| Revenues $3,900 ÷ 7,800 × $9,000,000 = | $4,500,000 |
| Costs 3,900,000                          |           |
| Income recognized in 1991                | – 600,000 |

Income recognized in 1992 | $100,000 |

9. (a) Under the completed-contract method all revenue and expenses are deferred on profitable contracts until the contract is complete, but losses are recognized immediately (conservatism) on unprofitable contracts. Project #1 is projecting a profit of $60,000 ($420,000 – $240,000 – $120,000) and is estimating $120,000 in additional cost to complete the contract. Since the contract is profitable and is not complete, Pell should not recognize any gross profit in 1999 under the completed-contract method.

Project #2 is projecting a loss of $20,000 ($300,000 – $280,000 – $40,000) and the loss should be recognized in full for 1999.
10. (b) Using the percentage-of-completion method, Pell should recognize the portion of the estimated gross profit that is associated with the percentage of the contract that is complete for profitable contracts, but with unprofitable contracts, the company should recognize the total estimated loss immediately. Project #1 is 66 2/3% complete. The percentage complete is computed by dividing the cost to date ($240,000) by the estimated total cost of the contract ($360,000). This percentage is then multiplied by the total estimated gross profit on the contract to calculate the gross profit recognized in 1999. In this case 66 2/3% × $60,000 = $40,000 profit recognized.

Project #2 is projecting a loss of $20,000 ($300,000 – $280,000 – $40,000) and the loss should be recognized in full for 1999.

In summary, Project #1 should recognize a profit of $40,000 and Project #2 should recognize a loss of $20,000, for a net of a $20,000 profit.

11. (b) Using the completed-contract method, all revenue is recognized in the year the contract is completed. The period of collection or if progress billings exceed costs have no impact on the period of revenue recognition.

12. (b) Under the percentage-of-completion method for long-term contracts, the income recognized each period is the total income recognized to date less the income recognized in prior periods. Progress billings are not a part of the calculation of income recognized.

13. (a) Income recognized in the third year of a five-year construction contract using percentage-of-completion method would be calculated by multiplying the ratio of the total cost incurred to date divided by the estimated total cost times the estimated total gross profit on the contract less the gross profit recognized in years one and two. Note that billings on the contract do not affect the calculation of income recognized.

14. (a) Actual costs are deducted from revenues in the fourth year and the revenues recognized are determined by the difference between the contract price and revenues previously recognized.

15. (a) According to ASC 605 (par. 12), the installment method of accounting is not acceptable unless “collection of the sale price is not reasonably assured.”

16. (c) Uncollected accounts receivable at 12/31/93
   Gross profit percentage
   Deferred gross profit 12/31/93
   × 40%
   $240,000

17. (c) Accounts receivable at 12/31/95 = $800,000 - 300,000 =
   Gross profit rate = 1 – (480,000 + 800,000) =
   Deferred gross profit at 12/31/95 =
   $200,000

18. (d) 1997 sales not yet collected = $240,000 ÷ 4 = $ 600,000
   + 1997 sales collected
   450,000
   $1,050,000

19. (d) Sales of $400,000 have been collected. Therefore, the gross profit of 40% has been realized, or $160,000.

20. (c) | Year of sale |
      | 1997       | 1998     |
      a. Gross profit realized | $ 240,000 | $ 200,000 |
      b. Percentage            | 30%       | 40%      |
      c. Collections on sales (a/b) | $ 800,000 | $ 500,000 |
      Total sales              | $1,000,000| $2,000,000|
      Balance uncollected      | $ 200,000 | $1,500,000|
      Total accounts receivable at 12/31/98 = $1,700,000
21. (a) Under the cost-recovery method, gross profit is recognized only after the entire cost of the product(s) sold has been received.

22. (c) Under the cost-recovery method, gross profit is not recognized until the total cost is collected. In 1998 the cost of sales was $8,000 but collections were only $7,000 so Fox did not recognize any gross profit in 1998. By the end of 1999 total collections from 1998 sales were $10,000 ($7,000 in 1998 and $3,000 in 1999). At this point collections exceeded cost of sales by $2,000 and that amount should be recognized as gross profit in 1999 from 1998 sales.

The 1999 collections from 1999 sales were $12,000 and the cost of sales was $9,000. At this point the cost had been recovered and the differences between the collections ($12,000) and the cost of sales ($9,000) equals $3,000.

In summary, the total gross profit recognized at March 31, 1999 should be $2,000 from 1998 sales and $3,000 from 1999 sales for a total of $5,000.

23. (a)  
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest expense recorded</td>
<td>$1,500</td>
</tr>
<tr>
<td>Correct interest expense:</td>
<td></td>
</tr>
<tr>
<td>$ 5,000 × 12% × 10/12</td>
<td>$500</td>
</tr>
<tr>
<td>$15,000 × 12% × 6/12</td>
<td>900</td>
</tr>
<tr>
<td>$ 8,000 × 12% × 8/12</td>
<td>640</td>
</tr>
<tr>
<td><strong>Understatement of interest expense</strong></td>
<td><strong>$540</strong></td>
</tr>
</tbody>
</table>

24. (a) Proper correcting entries were made at 12/31/98, so the errors made in 1998 will have no effect on net income in 1999.

The ending inventory for 1999 is understated by $1,000. This will cause cost of goods to be overstated by $1,000 and net income to be understated by $1,000 (before taxes).

Depreciation understated by $800 will cause income to be overstated by $800. The net effect of these errors is a $200 understatement of income.

25. (c) The $3,000 overstatement of ending inventory in 1998 has no effect on the retained earnings at the end of 1999 because the error was automatically counterbalanced in the next fiscal period. (Income for 1998 was overstated and income for 1999 was understated by this error.)

The overstatement of depreciation expense in 1998 will cause retained earnings to be understated by $2,500. Adding the $200 understatement of income for 1999 as determined in #24, we find the total understatement of retained earnings to be $2,700.

26. (a) There will be no over/understatement of working capital at 12/31/00, because the inventory errors will have been counterbalanced, and the depreciation errors have no effect on working capital, which is defined as current assets less current liabilities.

27. (d) The key point is that the service period is from June 1, 20X6, to December 31,20X6 because the options are exercisable on January 2, 20X7. Therefore, the total compensation from the pricing model ($7 × 1,000 options) $7,000 is charged to compensation for 20X6.

28. (b) The total compensation is $24,000, the option model price of $8 each times the number of options, 3,000. Since the service period is two years, the compensation expense for 20X6 is $12,000 ($24,000/2 years). The net effect of the stock option plan is $8,400. The compensation expense is $12,000 minus the tax effect of $3,600 ($12,000 × 30%)

29. (a) The net effect of the stock option plan is $8,400. The compensation expense is $12,000 minus the tax effect of $3,600 ($12,000 × 30%)
30. (b) The pronouncement mentions two types of models, the Lattice type model and the closed-form model. The Black-Scholes-Merton model is an example of the closed-form model and the binomial model is an example of the Lattice type.

31. (d) ASC 718 only allows the use of the Fair Value Method as a means of valuing stock option.

32. (d) The service period is the period from the grant date, January 2, 20X6, to the exercise date, January 2, 20X8, or two years. Therefore, the total compensation of $320,000 (20,000 SARS \times \text{the estimated fair value of $16 each}) divided by two years equals the compensation expense of $160,000 each year.

33. (b) The liability at December 31, 20X7 is $360,000 (20,000 SARS \times \text{the estimated fair value of $18 each})

34. (c) The matching funds ($350,000 \times 2) are recognized as expense for the year. The difference between the market price and the carrying value of the treasury stock would be recorded as follows:

1997 Summary Entry

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Liability for stock purchase plan</td>
<td>$1,050,000$1</td>
</tr>
<tr>
<td>Treasury stock</td>
<td>$900,000</td>
</tr>
<tr>
<td>APIC</td>
<td>150,000</td>
</tr>
</tbody>
</table>

$15300,000 employee contribution and $700,000 employer contribution.

35. (a) A company records compensation expense based upon cash or stocks (at fair market value) contributed to the plan during the year. Therefore, the $45,000 cash and $54,000 value of the shares contributed to the plan are reported as compensation expense. The second and third transactions noted in the question do not result in any expense recognition.

36. (d) Generally, cash held by a bank as a compensating balance is included as cash on the balance sheet.

37. (a) Balance per books 3/31/97 $44,200

Deposits, April 1997:

| Per bank              | $58,400 |
| Less D.I.T., 3/31/97  | 10,300  |
| Cash available        |         |
| Disbursements, April 1997:
| Per bank              | $49,700 |
| Plus outstanding checks 4/30/97 | + 7,000 |
| Less outstanding checks 3/31/97 | - 12,600 |
| Cash balance per books 4/30/97  | $48,200 |

38. (d) The present value of the notes receivable represents the value of the services to be provided after 1997. As the services are rendered the amount will be transferred from the unearned revenue account to the revenue account.

39. (d) Since the franchiser has performed all of the required initial services, all of the initial franchise fee is recognized as revenue in 1995.

40. (c) Since the initial fee does not include any service or product obligation on the part of the franchiser, the entire cash payment and present value of the note represents the acquisition cost to the franchisee.

$40,000 + (2.91 \times 20,000) = 98,200.

41. (b) The earnings process is completed upon delivery of the product. Therefore, in 1998, revenue for 50,000 gallons at $3 each is recognized. The payment terms do not affect revenue recognition.

42. (d) Royalty revenue is 20% of Fantasy’s reported revenues. For 1999 the royalty revenue would be 20\% \times $1,500,000 or $300,000.
43. (d)  

<table>
<thead>
<tr>
<th>Unearned Service Contract Revenue Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance 1/1/92</td>
</tr>
<tr>
<td>1992 Revenue</td>
</tr>
<tr>
<td>960,000</td>
</tr>
<tr>
<td>1992 Cash receipts</td>
</tr>
<tr>
<td>$780,000</td>
</tr>
<tr>
<td>$570,000</td>
</tr>
<tr>
<td>$750,000</td>
</tr>
<tr>
<td>Balance 12/31/92</td>
</tr>
</tbody>
</table>

44. (c) Royalty expense is the higher of 10% of sales or a minimum of $60,000. The 10% of sales (10% × $800,000 = $80,000) is higher than the minimum and should be reported as royalty expense.

45. (d) Sales revenue = $27,560 ÷ 1.06 = $26,000 (the credit to the revenue account includes the 6% sales taxes).

Sales taxes for the quarter = $27,560 – $26,000 = $1,560
Sales taxes paid
Balance of sales taxes payable $960

46. (b) The $50,000 for radio ads should be accrued at 12/31/04. The $60,000 is a prepayment and should not be expensed in 2004. ($990,000 + 50,000 – 60,000 = $980,000)

47. (d)  

a. Cash Basis income: Revenue collected in May $3,200
b. Accrual Basis income: Revenue $3,200 Expenses (1,500) Income $1,700

Note: Ivy's cash investment of $1,000 would have increased her capital account and the withdrawal of $500. would decrease the capital account.

48. (b) The approach is to set up a T-account and calculate sales.

<table>
<thead>
<tr>
<th>ACCOUNTS RECEIVABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning balance</td>
</tr>
<tr>
<td>Sales (Calculate)</td>
</tr>
<tr>
<td>Cash collections</td>
</tr>
<tr>
<td>Write-offs</td>
</tr>
<tr>
<td>Ending balance</td>
</tr>
</tbody>
</table>

49. (d) Cash basis pretax income - 1999 $60,000
Less A/R 12/31/98 (20,000)
Plus A/R 12/31/99 40,000
Plus A/P 12/31/98 30,000
Less A/P 12/31/99 (15,000)
Pretax accrual income - 1999 $95,000

The beginning A/R should be subtracted because it represents revenues that were earned in 1998 but collected in 1999. The ending A/R should be added because it is revenue earned in 1999 that will be collected in 2000. The beginning A/P should be added because it was deducted on the cash basis when paid in 1999 but on the accrual basis is considered as an expense of 1998. The ending A/P should be subtracted because it is an expense on the accrual basis for 1999.
50. (c) The following accounting bases may be used to prepare financial statements in conformity with a comprehensive basis of accounting other than GAAP:
   a. Basis of accounting used by an entity to file its income tax return.
   b. Cash receipts and disbursements basis of accounting.
   c. Cash basis.
   d. Modifications of cash basis such as accruing income taxes and recording depreciation.
   e. A definite set of criteria having substantial support that is applied to all material items. For example: constant dollar or current cost statements.

51. (c) The key word is usually. Personal financial statements must present a statement of financial position but usually include both a statement of financial position and a statement of changes in net worth.

52. (b) Personal financial statements should report assets and liabilities at estimated current values at the date of the financial statements.

53. (b) Assets are included in personal financial statements at their fair market values. Therefore, the business interest would be included as a single amount (business entity theory) at its FMV.

54. (c) An investment in life insurance should be reported at its cash value less any outstanding loans for personal financial statements (AICPA Position Statement 82-1). The cash value of the policy at December 31, 1998 is $12,000 and the outstanding loan is for $3,000. The net value of $9,000 should be reported.

55. (c) Income taxes which would be due if the assets were liquidated are reported between liabilities and net worth. The amount is not a true liability but reflects the person’s position on a current value basis.

56. (a) Estimated income taxes for personal financial statements are based on the differences between the estimated current value of the assets and liabilities and their tax basis at the reporting date. The estimated tax liability should be shown on the statement of financial condition between the liabilities and net worth.

57. (d) In the statement of financial condition at April 30, 1999, the income tax liability is the estimated tax on earnings since January 1, 1999 (the 1998 tax liability was paid) plus the estimated tax on the differences between current values and bases of assets and liabilities.

58. (a) Assets are included at fair market value or $120,000 + $50,000 = $170,000.

59. (d) Either the cost recovery or the installment method may be used when there is no reasonable basis for estimating the collectibility of the sales price. The cost recovery method is the more conservative of the two approaches and is used when the degree of uncertainty is too great to justify the use of the installment method.

60. (d) Percentage of completion:
   Costs incurred $5,400,000/Total costs ($5,400,000 + $10,800,000) = 1/3
   Contract price = $18,000,000
   Revenue to be recognized in 1996 $ 6,000,000
   1996 contract costs 5,400,000
   Gross profit $ 600,000

61. (b) Cash is the critical event for income recognition in both the cost recovery and installment methods. The installment method defers the recognition of the gross profit initially and recognizes the gross profit in the future by multiplying the cash collections × gross profit rate. The cost recovery method defers the recognition of profit of any type until the cumulative cash receipts are greater than the cost of the asset sold.

62. (d) A net decrease in accounts receivable means that cash collections exceeded accrual sales. Therefore the cash basis would overstate income when compared to accrual basis. A net decrease in accrued expenses indicates that cash payments for expenses are greater than accrual expenses. Therefore cash basis would understate income versus accrual basis.
63. (d) 1996 current liabilities were too low producing a higher working capital amount ( overstated). Since an expense was not recorded in 1996 but was recorded in 1997, the retained earnings balance at the end of 1997 was correct.

64. (b) 

| JE | Accrued Real Estate Taxes Payable | 8,000 |
|    | Prepaid Taxes                     | 4,000 |
|    | Cash                             | 12,000 |

To record the payment of six months taxes at $2,000 per month; four months ($8,000) for the accrued taxes for July 1 through October 31; and prepaid taxes ($4,000) for the two months of November and December. The cost of $2,000 per month is calculated by dividing the semi-annual installment of $12,000 by six months.

65. (d) The question is when should revenues be recognized and the appropriate expenses be "matched" against them. Since Rawl Co. makes monthly service calls to the customers and incurs most of its cost at that point, the revenue should be recognized monthly or "evenly over the contract year as the services are performed."

66. (b) The solutions approach is to use a "T" account.

### Current Liability for Advances from Customers

<table>
<thead>
<tr>
<th></th>
<th>Beginning Balance</th>
<th>Orders Received</th>
<th>Ending Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orders Shipped</td>
<td>164,000</td>
<td>184,000</td>
<td>$ 88,000</td>
</tr>
<tr>
<td>Advances Canceled</td>
<td>50,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

67. (c)  

\[
\text{Cash Collected} \quad \$200,000 \\
\text{Plus - Increase in Accounts Receivable} \quad 20,000 \\
\text{Less - Increase in Unearned Fees} \quad (5,000) \\
\text{SERVICE REVENUE EARNED} \quad \$215,000
\]

68. (a) The income recognized in the fourth and final year of the contract using the percentage-of-completion method would be calculated as follows:

\[
\begin{array}{c}
\text{Contract Price} \\
\text{Less - Actual Total Cost} \quad (\text{XXXX}) \\
\text{Total Actual Gross Profit} \quad \text{XXXX} \\
\text{Less - Income Previously Recognized} \quad (\text{XXXX}) \\
\text{Income Recognized in Year Four} \quad \text{XXXX}
\end{array}
\]

Therefore, both Actual Total Cost and Income Previously Recognized are used in the calculation.

69. (c) The gross profit recognized on an installment sale in any given year is calculated by multiplying the gross profit percentage by the portion of the sales price collected in that year or by multiplying the percentage of the sales price collected \( \text{in proportion to the cash collection} \) times the total gross profit on the sale. Answer (a) is incorrect because it recognizes revenue at the point of sale and answer (d) describes the cost recovery method of revenue recognition. Answer (b) is incorrect because it does not represent any revenue recognition method that is currently used.
70. (b) In accrual accounting, revenues are recognized when earned and expenses when incurred. In this question, when the three-year royalty contract is paid, the company should debit the asset, Prepaid Royalties, and credit cash. As the asset is used and the expense incurred, the company should increase Royalty Expense and decrease the Prepaid Royalties account.

71. (a) The value of the options, which is the amount reported in the financial statement, is the value of the benefit from the options:

\[
\begin{align*}
\text{Benefit per share} &= (25 - 10) = 15 \\
\text{Number of shares} &= 10,000 \\
\text{Total benefit before tax} &= 150,000 \\
\text{Tax rate at 35\%} &= 52,500 \\
\text{Benefit after tax} &= 97,500 \\
\end{align*}
\]

Therefore, the net worth at December 31, 1993, would be the beginning balance of $400,000 plus the value of the stock option of $97,000 = $497,500.

72. (c) Since none of the services have been rendered in 1998, all fees are unearned. The question asks for “net” unearned fees. Therefore, the allowance for uncollectible fees are taken into account. The journal entry to record the transactions is summarized as follows:

\[
\begin{align*}
12/31/98 \\
\text{Cash} (21 \times 10,000) &= 210,000 \\
\text{Notes receivable} (21 \times 20,000) &= 420,000 \\
\text{Allowance for uncollectible notes} &= 20,000 \\
\text{Unearned franchise fees} &= 610,000 \\
\end{align*}
\]

73. (d) Under the completed-contract method, revenues are recognized only when the job is complete. Recording or collection of progress billings has no effect on the income statement.

74. (b) Sip paid two years’ minimum annual fees on January 1, 1998. One-half of the fees are for royalty fees expense for 1998 and the other one-half represents a prepayment for 1999. The prepayment would be a current asset on the December 31, 1998 balance sheet.

75. (c) The understatement of beginning inventory and the overstatement of ending inventory both cause the cost of goods sold to be understated. The total understatement is $78,000 ($26,000 + $52,000).

76. (a) 1997

\[
\begin{align*}
\text{Sales} &= 14,000,000 \\
\text{Collections} &= 1,400,000 \\
\text{Accounts receivable at 12/31/97} &= 12,600,000 \\
\text{Gross profit rate} &= \times 40\% \\
\text{Deferred gross profit 12/31/97} &= 5,040,000 \\
\end{align*}
\]

77. (d) 1998 collections

\[
\begin{align*}
\text{Gross profit rate} &= \times 40\% \\
\text{Realized gross profit} &= 808,000 \\
\end{align*}
\]

108-8
78. (d) The deferred gross profit on the balance sheet at December 31, 2000 should be the balances in the accounts receivable accounts for 1999 and 2000 multiplied times the appropriate gross profit percentage:

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
<th>2000</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sales</td>
<td>900,000</td>
<td>600,000</td>
</tr>
<tr>
<td>Less Collections</td>
<td>(300,000)</td>
<td>(300,000)</td>
</tr>
<tr>
<td>Write offs</td>
<td>(50,000)</td>
<td>(200,000)</td>
</tr>
<tr>
<td>Accounts Receivable Balance</td>
<td>550,000</td>
<td>100,000</td>
</tr>
<tr>
<td>× Gross Profit Rate</td>
<td>× 40%</td>
<td>× 30%</td>
</tr>
<tr>
<td><strong>Deferred Gross Profit 12/31/00</strong></td>
<td><strong>220,000</strong></td>
<td><strong>30,000</strong></td>
</tr>
</tbody>
</table>

The Combined Deferred Gross Profit on the Balance Sheet is $250,000 ($220,000 + $30,000).

79. (d) Assets should be reported on personal statements of financial condition at estimated current value. The current value of the investment in stock at December 31, 1998 is $180,000.

80. (c) In ASC 718, the FASB requires companies with a history of forfeitures to use that history in estimating the compensation expense allocated over the service period. Therefore, Pall Corp. should record compensation expense of $192,000 for 20X6. The total compensation is $400,000 (40,000 options X estimated fair value of $10 each) times 96% = $384,000 divided by 2-year service period = $192,000 per year.

81. (c) Balance per bank 12/31/94 $38,075
   Deposits in transit                        +5,200
                                           43,275
   Outstanding checks $6,750
   Bank error                                  400
                                           7,150
   Adjusted bank balance                      $36,125

This amount is equal to the reconciled balance per the books.

82. (b) The gross profit percentage on the sale is 33 1/3% (gross profit $500,000 divided by sales $1,500,000). The total cash collected is $600,000, the $300,000 down payment plus the first installment of $300,000. The gross profit recognized in 1999 is the gross profit percentage × the total cash collected in 1999. In this case, the 33 1/3% × $600,000 = $200,000 gross profit recognized.

83. (a) The cost-recovery method should be used. Under this method, equal amounts of revenue and cost are recognized when a payment is received. When all cost are recovered, then profit is recognized.

84. (b) Jen should not include the employer’s matching contribution on the personal financial statements because the contribution does not vest until the employee has had three years of continuous employment with Komp. Jen’s vesting date will not occur until February 1, 1999.

   The personal statement of financial condition should include Jen’s contribution, 10% × ($21,000 + $23,000 + $26,000), which totals $7,000 plus the earnings of $1,200 for a grand total of $8,200.

85. (b) Commissions expense is 3% of sales for the year (3% × $15,000,000 = $450,000).

86. (a) Value of assets in excess of basis $400,000
   Tax rate                                   × 30%
   Provision for estimated taxes              $120,000
87. (d) The sales for 1999 are calculated by dividing the deferred gross profit at December 31, 1999 by the gross profit percentage ($560,000 × 40% = $1,400,000 in sales). Cash collections are total sales less the December 31, 1999 balance in installment accounts receivable ($1,400,000 – $800,000 = $600,000 cash collections). The gross profit realized is the cash collections times the gross profit percentage ($600,000 × 40% = $240,000).

88. (a) Under either the completed-contract or the percentage-of-completion method, progress billings are reflected only on the balance sheet and an anticipated loss must be provided for in the year in which the loss is first projected.

89. (c) Since the installment note at face value includes the 12% interest, the correct balance at the end of six months should be the face amount of the note reduced for the six payments less the unamortized discount on the note. This amount should be equal to the present value of the remaining monthly payments discounted at 12%.

90. (a) The assets are included at fair market value—$337,500 + $35,000 = $372,500.

91. (a)

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 September 15</td>
<td>Payment</td>
<td>$17,000</td>
</tr>
<tr>
<td></td>
<td>Accrual - $60,000 × 15%</td>
<td>9,000</td>
</tr>
<tr>
<td></td>
<td>TOTAL ROYALTY REVENUE</td>
<td>$26,000</td>
</tr>
</tbody>
</table>

92. (a) Accrual basis revenue $2,300,000 
Less: Increase in accounts receivable (150,000)
Accounts receivable written off (10,000)
1996 sales on cash basis $2,140,000

93. (a) The key point is that the construction in progress account (CIP) under percentage completion represents the cost plus the gross profit recognized. Therefore, the 1997 balance in CIP is the beginning of $122,000 plus the 1997 cost of $192,000 = $314,000 plus the profit in 1997. The profit recognized in 1997 would be the ending balance of CIP of $364,000 less $314,000 for a total of $50,000.

94.-96. Entries to correct errors:

<table>
<thead>
<tr>
<th>Account Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Cash</td>
<td>$1,000</td>
</tr>
<tr>
<td>2) Purchases</td>
<td>1,600</td>
</tr>
<tr>
<td>3) Depreciation</td>
<td>900</td>
</tr>
<tr>
<td>4) Office supplies expense</td>
<td>200</td>
</tr>
<tr>
<td>5) Sales</td>
<td>3,000</td>
</tr>
</tbody>
</table>

94. (a) Adjustments to net income:

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) Purchases</td>
<td>$1,600</td>
</tr>
<tr>
<td>3) Depreciation</td>
<td>900</td>
</tr>
<tr>
<td>5) Sales</td>
<td>3,000</td>
</tr>
</tbody>
</table>

Net income understated by $500
95. (c) Effect on Working capital:

<table>
<thead>
<tr>
<th></th>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(2)</td>
<td></td>
<td>1,600</td>
</tr>
<tr>
<td>(3)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(4)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(5)</td>
<td>3,000</td>
<td>—</td>
</tr>
</tbody>
</table>

Working capital understated by $1,400

96. (d) Effect on assets:

<table>
<thead>
<tr>
<th></th>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(2)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(3)</td>
<td>—</td>
<td>900</td>
</tr>
<tr>
<td>(4)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(5)</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Assets overstated by $900

97. (a) The correct amount of 1996 interest expense is $4,080, as computed below:

11/1/95 note
Interest from 1/1/96 to 10/31/96
($10,000 x 12% x 10/12) $1,000

2/1/96 note
Interest from 2/1/96 to 7/31/96
($30,000 x 12% x 6/12) 1,800

5/1/96 note
Interest from 5/1/96 to 12/31/96
($16,000 x 12% x 8/12) 1,280

$4,080

Since interest expense of $3,000 was recorded, 1996 interest expense was understated by $1,080 ($4,080 - $3,000).

98. (b) The key word is "usually." Personal Financial Statements must include a statement of financial position and "usually" include an optional statement of changes in net worth.

99. (a) As a general rule in accounting, assets are not offset against related liabilities. An exception to this rule is found in personal financial statements. Cash surrender value is reported as an asset, net of loans, on the statement of financial position for personal financial statements. In this example, cash surrender value of $7,000 less the loans of $2,500 are reported at the net amount of $4,500.

100. (d) The following accounting bases may be used to prepare financial statements in conformity with a comprehensive basis of accounting other than GAAP:

a. Basis of accounting used by an entity to file its income tax return.
b. Cash receipts and disbursements basis of accounting.
c. Cash basis.
d. Modifications of cash basis such as accruing income taxes and recording depreciation.
e. A definite set of criteria having substantial support that is applied to all material items. For example: constant dollar or current cost statements.
f. Basis of accounting used by an entity to comply with the financial reporting requirements of a government regulatory agency.
101. (c)
1). Total Deferred Gross Profit = Total Sales x Gross Profit Rate
   = $1,400,000 x 40%
   = $560,000

2). Ending Balance in Deferred Gross Profit = Total Gross Profit -- Realized (see 1 above)
   = $560,000 -- $240,000
   = $320,000

3). Realized Gross Profit = A/R Collected x Gross Profit Rate
   $240,000
   = A/R collected x 40%
   A/R collected
   = $240,000 / 40%
   = $600,000

4). Ending balance in A/R = Total Sales -- A/R collected (see 3 above)
   = $1,400,000 -- $600,000
   = $800,000

102. (a) SAS 62 states that modified cash basis includes any modifications having substantial support in the authoritative literature. Since the modified cash basis is not formalized in the accounting literature, modifications have evolved through common usage. The two examples cited in SAS 62 are the accrual of taxes and the recording of depreciation. Therefore, the answer is “yes”.

103. (c) Sales (200,000 boxes x $2 each) $400,000
    Less sales returns (5%) (10,000 boxes x $2) (20,000)
    Net sales $380,000
    Less cost of sales (190,000 boxes x $1) (190,000)
    Less cost to process returns (10,000)
    Operating profit $180,000

104. (c) This is the “tweener” account and the amount is $40,000.

105. (d) Income tax-basis financial statements differ from those prepared under GAAP in that income tax-basis financial statements recognize certain revenues and expenses in different reporting periods. For example, GAAP requires the recognition of warranty expenses on accrual basis but tax-basis reporting requires the use of cash basis. Magazine subscriptions are recognized as revenue under GAAP when earned but recognized on tax-basis when the cash is collected. These temporary differences create deferred assets or deferred liabilities.

106. (b) This is a common question on the CPA exam. The key is to read the agreement carefully. Boulder should record royalty revenue of 10% of patent related sales for 2003 (10% x $300,000) = $30,000 royalty revenue.

107. (a) Since the compensating balance and the restricted cash are not available for normal operations, both of them should be disclosed in the footnotes.

108. (c) Since KLU used the travel and lodging services, it should record an expense and liability for $10,000. When KLU supplies the advertising time to Hotel Co., the liability should be decreased and advertising revenue recognized. Answer (a) is incorrect because the expense must be recognized in the current period because KLU received the travel and lodging services in the current period. Answer (b) is wrong because revenue cannot be recognized until the advertising service has been performed.
109. (d) Since Jensen has not sold any of the goods at this point, Devlin should not recognize any of the revenue because the obligation is contingent upon Jensen’s reselling the goods. If the obligation is not contingent on the resale of the product, the sales revenue could be recognized (See Right of Return, page 10-19).

110. (a) Recognition of franchise revenue depends upon the amount of services performed. Since services were not complete and the question does not give any indication of the percentage performed, the amount of revenue recognized should be zero.

111. (b)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance per Books</td>
<td>$10,012</td>
</tr>
<tr>
<td>–Error on Check #101 ($95–$59)</td>
<td>(36)</td>
</tr>
<tr>
<td>+Interest Earned</td>
<td>35</td>
</tr>
<tr>
<td>–Service Charge</td>
<td>(50)</td>
</tr>
<tr>
<td>Adjusted Cash Balance—Books</td>
<td>$  9,961</td>
</tr>
</tbody>
</table>

112. (b) The correct journal entry would be as follows:

JE     Cash  20,000  
       Sales  18,000  
       Liability for service contract  2,000  

Therefore, Hayworth overstated sales by $2,000 which would overstate net income.

113. (c) The balance in the accounts receivable account for Year 2 of $900,000 times the gross profit rate for Year 2 equals the balance in the Year 2 deferred gross profit account of $252,000. Therefore the gross profit rate equals the $252,000/$900,000 or 28%.

114. (b) The cash-basis consulting revenue would be the consulting fee revenue of $25,000 on accrual basis less the portion not collected of $3,500 consulting fees receivable for a cash-basis revenue of $21,500. The unearned consulting fees of $2,000 are recorded by debiting cash and crediting unearned consulting fees. So, on a cash basis this would be considered as consulting fee revenue of $2,000. Capital total consulting fee revenue on a cash basis would be $21,500 + 2,000 for a total of $23,500.

115. (c) The use of the installment sales method of revenue recognition can not simply be elected. To justify the installment method, the installment sale must be material and there can not be a reasonable basis for estimating the collectability of the receivable. This is an example of conservatism.
Chapter Ten
Solutions to Revenue and Expense Recognition, Miscellaneous Items Problems

NUMBER 1

1.  
Computation of Gross Profit to Be Recognized Under Completed-Contract Method

No computation necessary. No gross profit is to be recognized prior to completion of contract.

Computation of Billings on Uncompleted Contract in Excess of Related Costs Under Completed-Contract Method

- Construction costs incurred during the year: $1,250,000
- Partial billings on contract (30% × $6,000,000): $1,800,000

$ (550,000)

2.  
Computation of Gross Profit to Be Recognized Under Percentage-of-Completion Method

- Total contract price: $6,000,000
- Total estimated cost ($1,250,000 + $3,750,000): $5,000,000
- Estimated total gross profit from contract: $1,000,000
- Percentage-of-completion: 25%
- Gross profit to be recognized during the year ($1,000,000 × 25%): $250,000

Computation of Billings on Uncompleted Contract in Excess of Related Costs Under Percentage-of-Completion Method

- Construction costs incurred during the year: $1,250,000
- Gross profit to be recognized during the year (above): $250,000
- Total charged to construction-in-progress: $1,500,000
- Partial billings on contract (30% × $6,000,000): $1,800,000

$ (300,000)

NUMBER 2

Maple Corporation
INCOME BEFORE INCOME TAXES ON INSTALLMENT SALE CONTRACT
For the Year Ended December 31, 19X9

Sales: $556,000
Cost of sales: $417,000
Gross profit: $139,000
Interest income (Schedule 1): $27,360
Income before income taxes: $166,360

Schedule 1
Computation of Interest Income on Installment Sale Contract

Cash selling price: $556,000
Deduct payment made July 1, 19X9: $100,000
Interest rate: × 12%
Annual interest: $54,720
Interest July 1, 19X9 to December 31, 19X9: ($54,720 × 1/2): $27,360
NUMBER 3

Hobson, Inc.

APPLICATION OF CASH RECEIPTS FROM SALE OF IDLE PLANT FACILITY TO COST RECOVERY, DEFERRED INCOME, AND INCOME RECOGNIZED UNDER THE COST RECOVERY METHOD OF ACCOUNTING

For the Period January 1, 1997, to February 1, 2000

<table>
<thead>
<tr>
<th>Date</th>
<th>Cash received</th>
<th>Note receivable</th>
<th>Idle plant (net)</th>
<th>Deferred income</th>
<th>Income recognized</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 1997</td>
<td>$100,000</td>
<td>$600,000</td>
<td>$(500,000)</td>
<td>$(200,000)</td>
<td></td>
</tr>
<tr>
<td>July 1, 1998</td>
<td>190,000</td>
<td>(100,000)</td>
<td></td>
<td>(90,000)</td>
<td></td>
</tr>
<tr>
<td>December 31, 1999</td>
<td>275,000</td>
<td>(200,000)</td>
<td></td>
<td>(10,000)</td>
<td>$(65,000)*</td>
</tr>
<tr>
<td>February 1, 2000</td>
<td>332,500</td>
<td>(300,000)</td>
<td></td>
<td></td>
<td>(32,500)</td>
</tr>
<tr>
<td>February 1, 2000</td>
<td></td>
<td></td>
<td></td>
<td>300,000</td>
<td>(300,000)</td>
</tr>
</tbody>
</table>

*Total cash received $565,000 ($100,000 + $190,000 + $275,000)
Idle plant (net) 500,000
Income recognized $65,000

NUMBER 4

a. Bow must have a system that is capable of meeting both of the following conditions for the Crecy contract:
   - Reasonable estimates of profitability at completion.
   - Reliable measures of progress toward completion.

b. At December 31, 1999, Bow should calculate the percentage of completion by comparing the costs incurred to date, less costs of unused materials, to the estimated total cost to complete Crecy. Income to date equals the percentage-of-completion multiplied by the estimated total profit to be earned on the contract. The 1999 income equals the income to be recognized to December 31, 1999, less the income reported under the contract in 1998.

   When contract materials are purchased but not used, costs of the unused materials are excluded from income recognition calculations. Otherwise, the early period income reported may be overstated compared with the income earning efforts of that period.

c. Bow should report a current asset for the Crecy accounts receivable, and another for the excess of costs incurred plus total profit recognized over contract billings.

d. Assuming Bow has elected early adoption of ASC 740, Accounting for Income Taxes, Bow should report a current deferred tax liability equal to its total net income reported in 1998 and 1999 multiplied by its enacted 2000 average tax rate. A deferred income tax expense should be recognized for the increase during 1999 in the deferred tax liability balance.
Chapter 10 Simulation Exercises

NUMBER 1 – Consists of Sections A and B

A:
London, Inc. began operation of its construction division on October 1, 1998, and entered into contracts for two separate projects. The Beta project contract price was $600,000 and provided for penalties of $10,000 per week for late completion. Although during 1999 the Beta project had been on schedule for timely completion, it was completed four weeks late in August 2000. The Gamma project's original contract price was $800,000. Change orders during 2000 added $40,000 to the original contract price.

The following data pertains to the separate long-term construction projects in progress:

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>Gamma</th>
</tr>
</thead>
<tbody>
<tr>
<td>As of September 30, 1999:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs incurred to date</td>
<td>$360,000</td>
<td>$410,000</td>
</tr>
<tr>
<td>Estimated costs to complete</td>
<td>40,000</td>
<td>410,000</td>
</tr>
<tr>
<td>Billings</td>
<td>315,000</td>
<td>440,000</td>
</tr>
<tr>
<td>Cash collections</td>
<td>275,000</td>
<td>365,000</td>
</tr>
<tr>
<td>As of September 30, 2000:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs incurred to date</td>
<td>450,000</td>
<td>720,000</td>
</tr>
<tr>
<td>Estimated costs to complete</td>
<td>----</td>
<td>180,000</td>
</tr>
<tr>
<td>Billings</td>
<td>560,000</td>
<td>710,000</td>
</tr>
<tr>
<td>Cash collections</td>
<td>560,000</td>
<td>625,000</td>
</tr>
</tbody>
</table>

Additional Information:

• London accounts for its long-term construction contracts using the percentage-of-completion method for financial reporting purposes and the completed-contract method for income tax purposes.

• London elected early application of ASC 740, Accounting for Income Taxes, for the year ended September 30, 1999. Enacted rates are 25% for 1999 and 30% for future years.

• London's income before income taxes from all divisions, before considering revenues from long-term construction projects, was $300,000 for the year ended September 30, 1999. There were no other temporary or permanent differences.

Required:

a. Prepare a schedule showing London's gross profit (loss) recognized for the years ended September 30, 1999, and 2000, under the percentage-of-completion method.

b. Prepare a schedule showing London's balances in the following accounts at September 30, 1999, under the percentage-of-completion method:
   • Accounts receivable
   • Costs and estimated earnings in excess of billings
   • Billings in excess of costs and estimated earnings

c. Prepare a schedule reconciling London's financial statement income and taxable income for the year ended September 30, 1999, and showing all components of taxes payable and current and deferred income tax expense for the year then ended. Do not consider estimated tax requirements.
B: At December 31, 1996, Roko Co. has two fixed price construction contracts in progress. Both contracts have monthly billings supported by certified surveys of work completed. The contracts are:

- The Ski Park contract, begun in 1995, is 80% complete, is progressing according to bid estimates, and is expected to be profitable.
- The Nassu Village contract, a project to construct 100 condominium units, was begun in 1996. Thirty-five units have been completed. Work on the remaining units is delayed by conflicting recommendations on how to overcome unexpected subsoil problems. While the total cost of the project is uncertain, a loss is not anticipated.

Required:

a. Identify the alternatives available to account for long-term construction contracts, and specify the criteria used to determine which method is applicable to a given contract.

b. Identify the appropriate accounting method for each of Roko's two contracts, and describe each contract's effect on net income for 1996.

NUMBER 2

The following information pertains to Baron Flowers, a calendar-year sole proprietorship, which maintained its books on the cash basis during the year.

**Baron Flowers**

**TRIAL BALANCE**

*December 31, 2001*

<table>
<thead>
<tr>
<th></th>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 25,600</td>
<td></td>
</tr>
<tr>
<td>Accounts Receivable, 12/31/00</td>
<td>16,200</td>
<td></td>
</tr>
<tr>
<td>Inventory, 12/31/00</td>
<td>62,000</td>
<td></td>
</tr>
<tr>
<td>Furniture &amp; fixtures</td>
<td>118,200</td>
<td></td>
</tr>
<tr>
<td>Land improvements</td>
<td>45,000</td>
<td></td>
</tr>
<tr>
<td>Accumulated depreciation, 12/31/00</td>
<td></td>
<td>$ 32,400</td>
</tr>
<tr>
<td>Accounts payable, 12/31/00</td>
<td></td>
<td>17,000</td>
</tr>
<tr>
<td>Baron, Drawings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baron, Capital, 12/31/00</td>
<td></td>
<td>124,600</td>
</tr>
<tr>
<td>Sales</td>
<td></td>
<td>653,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>305,100</td>
<td></td>
</tr>
<tr>
<td>Salaries</td>
<td>174,000</td>
<td></td>
</tr>
<tr>
<td>Payroll taxes</td>
<td>12,400</td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>8,700</td>
<td></td>
</tr>
<tr>
<td>Rent</td>
<td>34,200</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>12,600</td>
<td></td>
</tr>
<tr>
<td>Living expenses</td>
<td>13,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$827,000</td>
<td>$827,000</td>
</tr>
</tbody>
</table>

Baron has developed plans to expand into the wholesale flower market and is in the process of negotiating a bank loan to finance the expansion. The bank is requesting 2001 financial statements prepared on the accrual basis of accounting from Baron. During the course of a review engagement, Muir, Baron's accountant, obtained the following additional information.
1. Amounts due from customers totaled $32,000 at December 31, 2001.

2. An analysis of the above receivables revealed that an allowance for uncollectible accounts of $3,800 should be provided.

3. Unpaid invoices for flower purchases totaled $30,500 and $17,000, at December 31, 2001, and December 31, 2000, respectively.

4. The inventory totaled $72,800 based on a physical count of the goods at December 31, 2001. The inventory was priced at cost, which approximates market value.

5. On May 1, 2001, Baron paid $8,700 to renew its comprehensive insurance coverage for one year. The premium on the previous policy, which expired on April 30, 2001, was $7,800.

6. On January 2, 2001, Baron entered into a twenty-five-year operating lease for the vacant lot adjacent to Baron's retail store for use as a parking lot. As agreed in the lease, Baron paved and fenced in the lot at a cost of $45,000. The improvements were completed on April 1, 2001, and have an estimated useful life of fifteen years. No provision for depreciation or amortization has been recorded. Depreciation on furniture and fixtures was $12,000 for 2001.

7. Accrued expenses at December 31, 2000 and 2001, were as follows:

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities</td>
<td>$ 900</td>
<td>$1,500</td>
</tr>
<tr>
<td>Payroll taxes</td>
<td>1,100</td>
<td>1,600</td>
</tr>
<tr>
<td></td>
<td>$2,000</td>
<td>$3,100</td>
</tr>
</tbody>
</table>

8. Baron is being sued for $400,000. The coverage under the comprehensive insurance policy is limited to $250,000. Baron's attorney believes that an unfavorable outcome is probable and that a reasonable estimate of the settlement is $300,000.

9. The salaries account includes $4,000 per month paid to the proprietor. Baron also receives $250 per week for living expenses.

**Required:**

a. Using the worksheet on the following page, prepare the adjustments necessary to convert the trial balance of Baron Flowers to the accrual basis of accounting for the year ended December 31, 2001. Formal journal entries are not required to support your adjustments. However, use the numbers given with the additional information to cross-reference the postings in the adjustment columns on the worksheet.

b. Write a brief memo to Baron explaining why the bank would require financial statements prepared on the accrual basis instead of the cash basis.
Baron Flowers  
WORKSHEET TO CONVERT TRIAL BALANCE TO ACCRUAL BASIS  
December 31, 2001

<table>
<thead>
<tr>
<th>Account title</th>
<th>Cash basis</th>
<th>Adjustments</th>
<th>Accrual Basis*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr.</td>
<td>Cr.</td>
<td>Dr.*</td>
</tr>
<tr>
<td>Cash</td>
<td>25,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>16,200</td>
<td></td>
<td></td>
</tr>
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<td>Inventory</td>
<td>62,000</td>
<td></td>
<td></td>
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<tr>
<td>Furniture &amp; fixtures</td>
<td>118,200</td>
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<td></td>
</tr>
<tr>
<td>Land improvements</td>
<td>45,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accumulated depreciation &amp; amortization</td>
<td>32,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>17,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baron, Drawings</td>
<td></td>
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</tr>
<tr>
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<td>8,700</td>
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<tr>
<td>Rent</td>
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<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>12,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living expenses</td>
<td>13,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>827,000</td>
<td>827,000</td>
<td></td>
</tr>
</tbody>
</table>

* Completion of these columns is not required.
A. On January 2, 20X6, Holt Inc. granted stock options to officers and key employees for the purchase of 20,000 shares of the company’s $10 par common stock at $25 per share. The options were exercisable beginning January 1, 20X8, by grantees still in the employ of the company, and expiring December 31, 20X9. The market price of Holt’s common stock on the grant date was $33 per share. Holt Inc., used the Black-Sholes-Merton option pricing model and estimated that the fair value of each of the options was $12.

On January 1, 20X7, Wilbert Hildreth, a long time employee passed away and his 2,000 options were terminated. Holt, Inc. does not have a history of forfeitures. The market value of the common stock on this date was $35 per share.

**Required:**
Prepare journal entries to record the above data for 20X6 and the termination of the options on January 1, 20X7.

B. COMMUNICATIONS
Employees fail to exercise stock options for a number of reasons: they leave the company, they cannot raise the money to exercise the options, the stock price does not increase, or the employees die. How should Holt, Inc. account for these anticipated forfeitures?

C. RESEARCH
ASC 718 mentions two types of pricing models to determine fair value of stock options. Find the paragraph in the ASC that mentions these two models and cut and paste that paragraph in the space provided.
### Chapter 10 Simulation Solutions

**NUMBER 1**

**A:**

**a. London Inc.**

**SCHEDULE OF GROSS PROFIT (LOSS)**

<table>
<thead>
<tr>
<th>For the Year Ended September 30, 1999:</th>
<th>Beta</th>
<th>Gamma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated gross profit (loss):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract price</td>
<td>$600,000</td>
<td>$800,000</td>
</tr>
<tr>
<td>Less total costs</td>
<td>400,000</td>
<td>820,000</td>
</tr>
<tr>
<td>Estimated gross profit (loss)</td>
<td><strong>$200,000</strong></td>
<td><strong>$(20,000)</strong></td>
</tr>
</tbody>
</table>

| Percent complete:                     |      |       |
| Costs incurred to date divided by     | **$360,000** | **$410,000** |
| Total costs                           | 400,000  | 820,000  |
| Percent complete                      | 90%     | 50%     |

| Gross profit (loss) recognized        | **$180,000** | **$(20,000)** |

| For the Year Ended September 30, 2000:|      |       |
| Estimated gross profit (loss):        |      |       |
| Contract price                        | $560,000 | $840,000 |
| Less total costs                      | $450,000 | $900,000 |
| Estimated gross profit (loss)         | **$110,000** | **$(60,000)** |

| Percent complete:                     |      |       |
| Costs incurred to date divided by     | **$450,000** | **$720,000** |
| Total costs                           | 450,000  | 900,000  |
| Percent complete                      | 100%    | 80%     |

| Gross profit (loss) recognized        | 110,000 | $(60,000) |
| Less gross profit (loss) recognized in prior year | 180,000 | $(20,000) |
| Gross profit (loss) recognized        | **$(70,000)** | **$(40,000)** |

**b. London Inc.**

**SCHEDULE OF SELECTED BALANCE SHEET ACCOUNTS**

*September 30, 1999*

| Accounts receivable                     | $115,000 |
| Costs and estimated earnings in excess of billings: |      |       |
| Construction in progress (Beta)          | **$540,000** |
| Less: Billings                          | **$315,000** |
| Costs and estimated earnings in excess of billings | 225,000 |
| Billings in excess of costs and estimated earnings: |      |       |
| Billings (Gamma)                        | **$440,000** |
| Less: Construction in progress           | **($390,000)** |
| Billings in excess of costs and estimated earnings | **$50,000** |
London Inc.

SCHEDULE OF INCOME TAXES PAYABLE AND INCOME TAX EXPENSE

September 30, 1999

Financial statement income:

From other divisions $300,000
From Beta project 180,000
From Gamma project (20,000)
Total financial statement income $460,000

Less temporary differences:

Beta project income (180,000)
Gamma project loss 20,000
Total taxable income $ 300,000

Taxes payable ($300,000 × 25%) $75,000
Deferred tax liability ($160,000 × 30%) 48,000

Tax expense:

Current $75,000
Deferred 48,000
123,000

B:

a. The two alternative accounting methods to account for long-term construction contracts are the percentage-of-completion method and the completed-contract method. The percentage-of-completion method must be used if both of the following conditions are met at the statement date:
   • Reasonable estimates of profitability at completion.
   • Reliable measures of progress toward completion.

If one or both of these conditions are not met at the statement date, the completed-contract method must be used.

b. The Ski Park contract must be accounted for by the percentage-of-completion method. Eighty percent of the estimated total income on the contract should be recognized as of December 31, 1996. Therefore, the 1996 income to be recognized will equal 80% of the estimated total income less the income reported under the contract in 1995.

The Nassau Village contract must be accounted for by the completed-contract method. Therefore no income or loss is recognized in 1996 under this contract.
**Baron Flowers**

**WORKSHEET TO CONVERT TRIAL BALANCE TO ACCRUAL BASIS**

*December 31, 2001*

<table>
<thead>
<tr>
<th>Account title</th>
<th>Cash basis</th>
<th>Adjustments</th>
<th>Accrual Basis*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr.</td>
<td>Cr.</td>
<td>Dr.*</td>
</tr>
<tr>
<td>Cash</td>
<td>25,600</td>
<td></td>
<td>25,600</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>16,200</td>
<td>(1) 15,800</td>
<td>32,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>62,000</td>
<td>(4) 10,800</td>
<td>72,800</td>
</tr>
<tr>
<td>Furniture &amp; fixtures</td>
<td>118,200</td>
<td></td>
<td>118,200</td>
</tr>
<tr>
<td>Land improvements</td>
<td>45,000</td>
<td></td>
<td>45,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>32,400</td>
<td>(6) 14,250</td>
<td>46,650</td>
</tr>
<tr>
<td>&amp; amortization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>17,000</td>
<td>(3) 13,500</td>
<td>30,500</td>
</tr>
<tr>
<td>Baron, Drawings</td>
<td></td>
<td>(9) 61,000</td>
<td>61,000</td>
</tr>
<tr>
<td>Baron, Capital</td>
<td>124,600</td>
<td>(7) 2,000</td>
<td>(5) 2,600</td>
</tr>
<tr>
<td>Allowance for uncollectible accounts</td>
<td>(2) 3,800</td>
<td></td>
<td>3,800</td>
</tr>
<tr>
<td>Prepaid insurance</td>
<td></td>
<td>(5) 2,900</td>
<td>2,900</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td></td>
<td>(7) 3,100</td>
<td>3,100</td>
</tr>
<tr>
<td>Estimated liability from lawsuit</td>
<td></td>
<td>(8) 50,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Sales</td>
<td>653,000</td>
<td>(1) 15,800</td>
<td>668,800</td>
</tr>
<tr>
<td>Purchases</td>
<td>305,100</td>
<td>(3) 13,500</td>
<td>318,600</td>
</tr>
<tr>
<td>Salaries</td>
<td>174,000</td>
<td>(9) 48,000</td>
<td>126,000</td>
</tr>
<tr>
<td>Payroll taxes</td>
<td>12,400</td>
<td>(7) 500</td>
<td>12,900</td>
</tr>
<tr>
<td>Insurance</td>
<td>8,700</td>
<td>(5) 300</td>
<td>8,400</td>
</tr>
<tr>
<td>Rent</td>
<td>34,200</td>
<td></td>
<td>34,200</td>
</tr>
<tr>
<td>Utilities</td>
<td>12,600</td>
<td>(7) 600</td>
<td>13,200</td>
</tr>
<tr>
<td>Living expenses</td>
<td>13,000</td>
<td>(9) 13,000</td>
<td></td>
</tr>
<tr>
<td>Income summary—inventory</td>
<td>(4) 62,000</td>
<td>(4) 72,800</td>
<td>10,800</td>
</tr>
<tr>
<td>Uncollectible accounts</td>
<td>(2) 3,800</td>
<td></td>
<td>3,800</td>
</tr>
<tr>
<td>Depreciation &amp; amortization</td>
<td>(6) 14,250</td>
<td></td>
<td>14,250</td>
</tr>
<tr>
<td>Estimated loss from lawsuit</td>
<td>(8) 50,000</td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>827,000</td>
<td>827,000</td>
<td>237,150</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>938,850</td>
</tr>
</tbody>
</table>

* Completion of these columns was not required.
Explanations of Adjustments

[1] To convert 2001 sales to accrual basis.
   Accounts receivable balances:
   December 31, 2001 $32,000
   December 31, 2000  16,200
   Increase in sales    $15,800


   Accounts payable balances:
   December 31, 2001 $30,500
   December 31, 2000  17,000
   Increase in purchases $13,500

[4] To record increase in inventory from 12/31/00 to 12/31/01.
   Inventory balances:
   December 31, 2001 $72,800
   December 31, 2000  62,000
   Increase in inventory $10,800

   Prepaid balances:
   December 31, 2001 ($8,700 x 4/12)  $2,900
   December 31, 2000 ($7,800 x 4/12)  2,600
   Decrease in insurance expense         $300

   Cost of leasehold improvement  $45,000
   Estimated life  15 years
   Amortization ($45,000 x 1/15 x 9/12)  2,250
   Depreciation expense on fixtures and equipment $12,000
   $14,250

[7] To convert expenses to accrual basis.

<table>
<thead>
<tr>
<th>Balances</th>
<th>December 31,</th>
<th>Increase in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001</td>
<td>2000</td>
</tr>
<tr>
<td>Utilities</td>
<td>$1,500</td>
<td>$ 900</td>
</tr>
<tr>
<td>Payroll taxes</td>
<td>1,600</td>
<td>1,100</td>
</tr>
<tr>
<td></td>
<td>$3,100</td>
<td>$2,000</td>
</tr>
</tbody>
</table>

[8] To record lawsuit liability at 12/31/01.
   Attorney's estimate of probable loss  $300,000
   Amount covered by insurance            250,000
   Baron's estimated liability            $50,000

   Salary ($4,000 x 12)                      $48,000
   Living expenses                          13,000
   $61,000
B:
To: Baron Flowers
From: Muir
Re: Accrual basis financial statements

You have asked me to explain why the bank would require financial statements prepared on the accrual basis instead of the cash basis. The bank is concerned about your ability to repay the loan. To assess that ability, it wants information about your earnings for the period, total assets, and all claims on those assets. This information about your enterprise's performance and financial position is provided more completely by accrual basis financial statements than by cash-basis financial statements.

Under the cash basis, revenues are recognized when received and expenses when paid. Earnings can be manipulated by the timing of cash receipts and disbursements. Accrual basis accounting, while grounded in cash flows, reports transactions and other events with cash consequences at the time the transactions and events occur. Revenues and expenses are reported in the accounting period benefited and reflect receivables and payables, not just what the enterprise was able to collect or chose to pay.

NUMBER 3
A. January 1, 20X6 MEMO ENTRY
Granted stock options to employees to purchase 20,000 shares of the company’s $10 par common stock at $25 per share. The options are exercisable beginning January 1, 20X6 and expiring December 31, 20X9. The market price at the grant date was $33 per share. Option pricing model estimated the fair value of each option was $12.

JOURNAL ENTRIES
DECEMBER 31, 20X6

<table>
<thead>
<tr>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation Expense</td>
<td>120,000*</td>
<td>PIC – Stock Options 120,000</td>
</tr>
</tbody>
</table>

*20,000 options x $12 per option = $240,000/2 years = $120,000

JANUARY 1, 20X7

<table>
<thead>
<tr>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIC – Stock optioned</td>
<td>12,000**</td>
<td>PIC – Expired Stock Options 12,000</td>
</tr>
</tbody>
</table>

**2,000 options x $12 each = $24,000/2 years = $12,000

NOTE: Wilbert Hildreth worked during the first year of the service period so the compensation expense for 20X6 is correct. However, since Mr. Hildreth died, the options will never be exercised. So, the PIC – stock options should be re-classified.

B. COMMUNICATIONS
In order to have a proper matching of expenses and revenue, compensation expense associated with stock options should be reduced by the anticipated forfeitures in the years in which the expense is recorded.

C. The two types of option pricing model are the closed-form model and the lattice type model.
Chapter Eleven
Other Assets, Liabilities and Disclosures
Accounting Standards Codification

This chapter includes ASC 310, Receivables, ASC 350, Intangibles, ASC 323, Equity Method and Joint Venture, ASC 360, Property, Plant and Equipment,ASC 405, Liabilities, ASC 710, Compensation-General and ASC 730, R & D

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  Accounting for Uncollectible Accounts

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  Property Stated on Cost Basis
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  Accounting for Retirements
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ACCOUNTS RECEIVABLE

DISCLOSURE
Accounts receivable should be disclosed on the statement of financial position at net realizable value:

\[
\begin{align*}
\text{Accounts Receivable (gross)} & \quad XX \\
\text{Less Allowance for Uncollectible Accounts} & \quad (XX) \\
\text{Net Realizable Value} & \quad XX
\end{align*}
\]

ACCOUNTING FOR UNCOLLECTIBLE ACCOUNTS
There are two approaches to accounting for uncollectible accounts:

- Allowance method
- Direct write-off method

A. Allowance Method
The allowance method is preferred by GAAP because it matches uncollectible accounts expense with credit sales in the same accounting period and establishes a valuation account to report the accounts receivable at net realizable value.

The normal journal entries are:

1. **To establish uncollectible accounts:**
   - JE Bad debt expense \( XX \)
   - JE Allowance from uncollectible accounts \( XX \)

2. **To write off an uncollectible account:**
   - JE Allowance from uncollectible accounts \( XX \)
   - JE Accounts receivable \( XX \)

3. **To record the recovery of an account previously written off:**
   - JE Accounts receivable \( XX \)
   - JE Allowance for uncollectible accounts \( XX \)
   - JE Cash \( XX \)
   - JE Accounts receivable \( XX \)

NOTE: The effect of the two above journal entries is
- JE Cash \( XX \)
- JE Allowance for uncollectible accounts \( XX \)

T-Account Summary of the above journal entries:

<table>
<thead>
<tr>
<th>Allowance for Doubtful Accounts</th>
<th>Write-offs</th>
<th>Beginning balance</th>
<th>Estimated expense</th>
<th>Recoveries</th>
<th>Ending balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11-1
Methods of estimating uncollectible accounts:
The allowance method uses two approaches to estimate the charges to bad debt expense.
- Balance sheet approach
- Income statement approach

Balance Sheet Approach:
The balance sheet approach analyzes accounts receivable and uses either a percentage of accounts receivable or an aging of accounts receivable to determine the required balance in the allowance for uncollectible accounts.

Income Statement Approach:
The income statement approach analyzes credit sales and uses a percentage of credit sales to determine the required balance in the bad debt expense account.

Example:
X Company had credit sales of $100,000 in the current year. The allowance for doubtful accounts had a balance of $1,200 at the beginning of the year. Writeoffs of $1,600 were recorded during the year, recoveries were $300. The Company estimates bad debt expense at 1% of credit sales and an aging of the accounts receivable at year-end indicates that the required balance in the allowance account is $1,100.

To record estimated uncollectible accounts:

<table>
<thead>
<tr>
<th></th>
<th>Income Statement Approach</th>
<th>Balance Sheet Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>JE Bad debt expense</td>
<td>$1,000*</td>
<td>$1,200**</td>
</tr>
<tr>
<td>Allowance for uncollectible accounts</td>
<td>$1,000</td>
<td>$1,200</td>
</tr>
</tbody>
</table>

* 1% X credit sales of $100,000 = $1,000
** The beginning balance in the allowance account of $1,200 – the write-offs of $1,600 + the recoveries of $300 = a debt balance of $100. The aging of accounts receivable indicates a required balance in the allowance account at the end of the year of $1,100. Therefore, the journal entry should be for $1,200 (the debit balance of $100 + the ending balance of $1,100 in the allowance account).

B. Direct Write-off Method
The direct write-off method may be used if bad debts are immaterial. This method is also used for tax purposes. Using the direct write-off method recognizes bad debt expense only upon the actual write-off of the account receivable. No allowance account is used. Recoveries are normally credited to the current year's expense account.

In the above example, if the direct write-off method had been used, the expense for the year would have been the $1,600 in writeoffs less the $300 in recoveries or $1,300. The net journal entry would be a debit to bad debt expense and a credit to accounts receivable for $1,300. Note that the direct write-off method does not use an allowance for uncollectible accounts.

PLEDGING, ASSIGNING AND FACTORING RECEIVABLES

PLEDGING (SECURED BORROWING)
Pledging is an agreement in which receivables are used as collateral for loans. The customers are usually unaware that the receivables have been pledged and continue to remit their payments to the company.

The only accounting issue associated with pledging is proper disclosure. The accounts receivable continue to be shown as a current asset but must be labeled as having been pledged. This identification can be done by a footnote or parenthetical disclosure. The related liability should also be identified as secured by the accounts receivable.
ASSIGNMENT OF RECEIVABLES (SECURED BORROWING)
The assignment of receivables is a more formalized type of collateral for a loan. The lender will identify specific receivables that will be used for the loan and approve the receivables to be used for collateral. The receivables usually remain on the books of the company seeking the loan and the customers are normally unaware that their accounts have been assigned. The accounting problem is adequate disclosure. The financial statements must disclose either by footnote or parenthetically that the receivables have been assigned and the related liability should disclose that receivables are being used as collateral for the loan.

FACTORING (SALE OF RECEIVABLES)
In order to accelerate the receipt of cash, some companies will sell (factor their receivables). Factoring is common in the furniture, textile and apparel industries. Factoring may be done on a with recourse or without recourse basis.

Factoring (Sale) Without Recourse
If receivables are factored without recourse, the buyer of the receivables assume the risk of collection and absorbs the loss for any uncollectible accounts. The receivables are removed from the books of the seller and the title and control of the receivables are transferred to the buyer. ASC 310 pointed out that a common form of factoring is the credit card sale, which is a means of transferring receivables without recourse, or with all of the risks and benefits of ownership.

Example: Burns Furniture Co. factors $250,000 of accounts receivable to commercial factors on a without recourse basis. Commercial factors charges 2% of accounts receivable as a finance charge and retains 4% of the accounts receivable as a contingency to cover possible sales discounts and sales returns and allowance.

The journal entry for Burns is as follows:

| JE | Cash               | $235,000 |
|    | Due from factor (4% x $250,000) | 10,000 |
|    | Loss on sale of receivables (2% x $250,000) | 5,000 |
|    | Accounts receivable | $250,000 |

Factoring (Sale) With Recourse
If accounts receivable are sold with recourse, the seller guarantees payment to the buyer if any of the accounts receivable become uncollectible. In recording this type of transaction, ASC 310 requires a financial components approach because the seller retains a continuing involvement with the receivables. The financial components approach assigns a value to the recourse provision.

Example: Use the same facts as in the previous example but assume that the recourse obligation is valued at $4,000. Burns Furniture Co. recorded the following journal entry:

| JE | Cash               | $235,000 |
|    | Due from factor    | 10,000   |
|    | Loss on sale of receivables* | 9,000 |
|    | Accounts receivable | $250,000 |
|    | Recourse liability | 4,000   |

*The loss on the receivables is the finance charge of $5,000 plus the $4,000 estimated costs of the recourse obligation.

ASC 310 - ACCOUNTING FOR TRANSFERS AND SERVICING OF FINANCIAL ASSETS AND EXTINGUISHMENT OF LIABILITIES
ASC 310 adopted a financial components approach to the transfer of financial assets based on control. The financial components approach replaces the old approach of viewing transferred financial assets as an inseparable unit that had been entirely sold or entirely retained. Values are now assigned to financial components such as recourse provisions, servicing rights and agreements to reacquire.

BASIC ACCOUNTING ISSUE
The basic accounting issue is whether the transferred assets result in a sale or secured borrowing. A sale results when a transferor gives up control. After a transfer, an entity recognizes the assets and liabilities it controls and derecognizes the assets it no longer controls and derecognizes liabilities that have been extinguished.
CONTROL IS SURRENDERED – SALE IS RECORDED

Control is considered to have been surrendered if the three following conditions have been met:

- The transferred assets are isolated from or beyond the reach of the transferor and its creditors (even a bankruptcy trustee).
- The transferee has a right to freely exchange or pledge the assets transferred without unreasonable constraints or conditions imposed on its contractual right.
- The transferor does not maintain control through an agreement to repurchase or redeem the transferred assets prior to maturity or an agreement, not obtainable elsewhere, to repurchase or redeem the transferred assets.

or

The holders of beneficial interest in a qualifying special-purpose entity can pledge or exchange those interests freely without unreasonable constraints or conditions imposed on their right.

If these three conditions are met, the transaction is considered a sale and if the three conditions are not met, the transaction is considered a secured borrowing.

Example: An application of ASC 310 can be seen in our previous discussion of transfer of receivables either by factoring, pledging, or assignment.

ASC 310 added the following three new terms to our accounting vocabulary:

- **Securitization** is the transfer of a portfolio of financial assets (e.g., trade receivables, mortgage loans, automobile loans, and credit card receivables) to a special-purpose entity, often a trust, and the sale of beneficial interests in the special-purpose entity to investors. The proceeds of the sale of these interests are paid to the transferor. Amounts of interest and principal collected on the securitized assets are paid to the investors in accordance with the legal agreement that established the special-purpose entity.

- A **servicing asset** is a contract under which future revenues from servicing fees, late charges, etc., are expected to more than adequately compensate the servicer. A **servicing liability** arises when such compensation is inadequate.

- An **undivided interest** is partial ownership as a tenant in common, for example, the right to the interest but not the principal of a security. This interest also may be pro rata, for example, a right to a proportion of the interest payments on a security.
FIXED ASSETS

In General
Fixed assets should be carried at cost of acquisition or construction in the historical accounts, unless such cost is no longer meaningful. Cost of land should ordinarily be shown separately. Cost of construction includes direct costs and overhead costs incurred, such as engineering, supervision and administration, interest, and taxes. Items treated as fixed assets should have at least one year of expected useful life to the enterprise, and normally the life is considerably longer. Items no longer in service should be written off in order that fixed assets will represent the cost of properties in service.

Classification
Those tangible assets used in operations and not intended for sale in the ordinary course of business are classified on the balance sheet as fixed assets provided they have an expected service life of more than one year. No one designation of this category has been accepted, and captions such as "fixed assets," "property, plant, and equipment," "general property," "properties," and numerous others are found in published financial statements. Depreciable and nondepreciable property ordinarily should be shown separately, and a further classification is often given.

Property Stated on Cost Basis
Cost means cost in cash or its equivalent. Preferably, the words "at cost" are appended to the principal plant caption to avoid any possibility of misunderstanding. Although cost is the accepted basis of reporting property, plant, and equipment, there are situations in which cost is no longer meaningful. By carrying plant at cost, less accumulated depreciation, there is a representation that the remaining balance of the investment is properly chargeable to future operations and has a fair chance to be recovered. If this assumption appears no longer valid with respect to material items, it may be prudent to recognize the loss by reducing the book value to the estimated remaining useful cost to the enterprise.

Components of Cost
The cost of properties acquired by purchase is the net price paid on a cash basis, plus all incidental payments necessary to put the asset in condition and location for use, such as freight and installation costs. When several assets are acquired at a group price, the price paid is allocated between the assets based on their relative value, as determined by such evidence as independent appraisal by professional appraisers or real estate brokers, or assessed valuations for property tax purposes.

If property other than cash is the consideration in a transaction, a fair measure of the actual cash cost is the amount of money which would have been realized if such property had first been directly converted into cash. If the property has no determinable fair market value, the market value of the properties received in the exchange may be used. A gain or loss will occur when fair market value differs from the book value of the property given up. In practice, exchanges of fixed assets often are recorded at the book values of the properties given up.

If the consideration employed in acquiring properties is in the form of the capital stock of the buying enterprise, a fair measure of actual cost is the amount of money which could have been raised through the issue of the securities for cash. If the securities are of uncertain value, however, an alternative measurement would be the estimated fair market price of the property acquired.

The principle of costing of self-constructed property, plant, and equipment is similar to the principle of costing of purchased assets of this type—they are recorded at the price paid to get them in condition and location for use. The practical problems involved in determining their cost are the same problems that are encountered in determining the cost of goods manufactured for resale. The direct costs of materials and labor are readily identified and charged to construction work in process. Indirect or overhead costs may be specifically identifiable items, as well as those allocated to construction in process on supportable cost-incurrence principles. Overhead costs include supervision, engineering and interest during construction. Enterprises which do not normally carry out their own construction usually follow the incremental cost method by limiting the overhead charged to construction to the increase which can be directly attributed to the work done on the plant and equipment. (See "Capitalization of Interest" later in this chapter.)
Land and land rights. These asset accounts should include the purchase cost of land owned in fee and of rights, interest, and privileges held in land owned by others. The following incidental costs are also properly included, among others: commissions to agents, attorneys' fees, demolition, clearing and grading, streets, sewer lines, and relocating or reconstructing property of others elsewhere in order to acquire possession.

Buildings. A building is a relatively permanent structure designed to house or safeguard property or persons, and its total cost should include not only the cost of the shell, but also expenditures for service equipment and fixtures made a permanent part of the structure. In addition to direct costs of construction, it is proper to capitalize such items as permits, architects' and engineers' fees, legal fees, and overhead directly applicable to construction.

Machinery and equipment. It is important to include all costs of purchase or manufacture together with all costs of installation. The latter would include such costs as transportation, labor, and testing during an experimental period. If machines are purchased under an agreement providing for royalties to be paid on units of production, these royalty payments are not costs of acquisitions and should be charged to operating expenses.

Accounting for Retirements
The asset accounts for property, plant, and equipment should include the costs of only those units which are used and useful to the enterprise; the allowance for depreciation accounts should relate to those units, and to no others. Although these objectives are theoretically simple, they are in practice difficult to achieve.

Idle plant, reserve, and stand-by equipment. Plant assets on the balance sheet may include property in use and property held with reasonable expectation of its being used in the business. It is not customary to segregate or indicate the existence of temporarily idle plant, reserve, or standby equipment. Property abandoned but not physically retired and facilities still owned but no longer adapted for use in the business, if material in amount, should be removed from plant accounts and recorded separately at an estimated realizable amount, appropriately explained.

Classification of Capital Expenditures
Additions. Additions represent entirely new units or extensions and enlargements of old units. Expenditures for additions are capitalized by charging either old or new asset accounts depending on the nature of the addition.

Betterments. A betterment does not add to existing plant. Expenditures for betterments represent increases in the quality of existing plant by rearrangements in plant layout or the substitution of improved components for old components so that the facilities are better in some way than they were when acquired. Such increases in the quality of improved facilities are measured by their increased productivity, greater capacity, or longer life. The cost of betterments is accounted for by charges to the appropriate property accounts and the elimination of the cost and accumulated depreciation associated with the replaced components, if any.

Extraordinary repairs. Expenditures to replace parts or otherwise to restore assets to their previously efficient operating condition are regarded as repairs. To be classified as an extraordinary repair, an expenditure must benefit future periods by increasing the useful life of an existing asset. Expenditures for extraordinary repairs are capitalized by charges to the appropriate accumulated depreciation account or by eliminating from the accounts the cost and accumulated depreciation on the replaced parts and charging the asset account for the cost of the repairs. The latter treatment is preferred because it maintains the integrity of the accounts in that the actual cost of the asset in use is recorded.

Deferred maintenance. Deferred maintenance is an amount equal to the expenditure necessary to restore a plant or item of equipment to normal operating efficiency. Accounting for deferred maintenance involves the establishment of an allowance account by a charge to operations in the period during which it occurs. Actual repairs and other deferred maintenance expenditures are then charged to the allowance account when they occur.

Replacements. Replacements involve an "in kind" substitution of a new asset for an old asset or part. Accounting for major replacements requires entries to retire the old asset or part and to record the cost of the new asset or part. Minor replacements are treated as period costs.
DEPRECIATION METHODS

Accounting for depreciation is a system of accounting to distribute the cost (or other book value) of tangible capital assets, less salvage, over their useful lives in a systematic and rational manner. Under generally accepted accounting principles as presently understood, depreciation accounting is a process of allocation, not of valuation, through which the productive effort (cost) to be matched with productive accomplishment (revenue) for the period is measured. Depreciation accounting, therefore, is concerned with the timing of the expiration of the cost of tangible fixed assets.

**Straight Line**

Asset cost is allocated based on time.

\[
\text{Cost – Salvage Value} \over \text{Useful Life} = \text{Depreciation}
\]

**Units-of-Production Method**

Cost less salvage value is spread over the service life of the asset such as production hours, miles, etc. For example, if a machine costing $10,000 has a productive life of 14,000 hours and 3,500 hours are used in year 1, depreciation in year 1 will be $2,500.

**Decreasing Charge Methods**

Called accelerated depreciation because the depreciation charge is greatest initially and decreases during the later years of useful life. Uneven expense is justified by proponents of this method on the basis that when the asset is new, repairs are lower, and in later years of useful life when depreciation is low, repairs would ordinarily be higher. This results in more even annual charges to operations during the asset life. Decreasing charge methods are also justified on the basis of greater expected output when the asset is new. Methods used are:

a. Declining balance (at a percentage of the straight-line rate)

b. Sum-of-the-years' digits

Assume that an asset cost $20,000, has a $2,000 salvage value and a 5-year estimated life.

Depreciation computation:

a. **Declining balance** at 200% of the straight-line rate.

<table>
<thead>
<tr>
<th>Year</th>
<th>S/L Rate</th>
<th>200% Rate</th>
<th>Depreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20%</td>
<td>40%</td>
<td>$8,000</td>
</tr>
<tr>
<td>2</td>
<td>20%</td>
<td>40%</td>
<td>4,800</td>
</tr>
<tr>
<td>3</td>
<td>20%</td>
<td>40%</td>
<td>2,880</td>
</tr>
<tr>
<td>4</td>
<td>20%</td>
<td>40%</td>
<td>1,728</td>
</tr>
<tr>
<td>5</td>
<td>20%</td>
<td>40%</td>
<td>592</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>$18,000</td>
</tr>
</tbody>
</table>

**Computations:**

Year (1) $20,000 \times 40\% = $8,000

Year (2) $20,000 – 8,000 = 12,000 \times 40\% = $4,800

Year (3) $12,000 – 4,800 = 7,200 \times 40\% = $2,880

Year (4) $7,200 – 2,880 = 4,320 \times 40\% = $1,728

Year (5) $4,320 – 1,728 = 2,592 \times 40\% = $1,037 (limited to $592)

Salvage value is ignored in the declining-balance method computations. However, depreciation is only recorded until the book value of the asset equals salvage value. In the above example, at the end of the asset's useful life $18,000 has been assigned to depreciation with $2,000 as salvage value. The example shows a rate of 200% of the straight-line rate, whereas the rate can be any amount over 100%, usually 125%, 150%, 175% or 200%.
b. **Sum-of-the-years' digits.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Digits</th>
<th>Depreciation Fraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>5/15</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>4/15</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3/15</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>2/15</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1/15</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>15/15</td>
</tr>
</tbody>
</table>

Depreciation amounts are computed as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost Less Salvage</th>
<th>Fraction</th>
<th>Depreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$18,000</td>
<td>5/15</td>
<td>$6,000</td>
</tr>
<tr>
<td>2</td>
<td>18,000</td>
<td>4/15</td>
<td>4,800</td>
</tr>
<tr>
<td>3</td>
<td>18,000</td>
<td>3/15</td>
<td>3,600</td>
</tr>
<tr>
<td>4</td>
<td>18,000</td>
<td>2/15</td>
<td>2,400</td>
</tr>
<tr>
<td>5</td>
<td>18,000</td>
<td>1/15</td>
<td>1,200</td>
</tr>
<tr>
<td>Total</td>
<td>15/15</td>
<td></td>
<td>$18,000</td>
</tr>
</tbody>
</table>

**Illustrative Problem:**

Thompson Corporation, a manufacturer of steel products, began operations on October 1, 20X5. The accounting department of Thompson has started the fixed-asset and depreciation schedule presented below. You have been asked to assist in completing this schedule. In addition to ascertaining that the data already on the schedule are correct, you have obtained the following information from the company's records and personnel:

- Depreciation is computed from the first of the month of acquisition to the first of the month of disposition.
- Land A and Building A were acquired from a predecessor corporation. Thompson paid $812,500 for the land and building together. At the time of acquisition, the land had an appraised value of $72,000 and the building had an appraised value of $828,000.
- Land B was acquired on October 2, 20X5, in exchange for 3,000 newly issued shares of Thompson's common stock. At the date of acquisition, the stock had a par value of $5 per share and a fair value of $25 per share. During October 20X5, Thompson paid $10,400 to demolish an existing building on this land so it could construct a new building.
- Construction of Building B on the newly acquired land began on October 1, 20X6. By September 30, 20X7, Thompson had paid $210,000 of the estimated total construction costs of $300,000. Estimated completion and occupancy are July 20X8.
- Certain equipment was donated to the corporation by a local university. An independent appraisal of the equipment when donated placed the fair value at $16,000 and the salvage value at $2,000.
- Machinery A's total cost of $110,000 includes installation expense of $550 and normal repairs and maintenance of $11,000. Salvage value is estimated as $5,500. Machinery A was sold on February 1, 20X7.
- On October 1, 20X6, Machinery B was acquired with a down payment of $4,000 and the remaining payments to be made in ten annual installments of $4,000 each beginning October 1, 20X6. The prevailing interest rate was 8%. The following data were abstracted from present-value tables:

<table>
<thead>
<tr>
<th>Present value of $1.00 at 8%</th>
<th>Present value of annuity of $1.00 in arrears at 8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 years .463</td>
<td>10 years 6.710</td>
</tr>
<tr>
<td>11 years .429</td>
<td>11 years 7.139</td>
</tr>
<tr>
<td>15 years .315</td>
<td>15 years 8.559</td>
</tr>
</tbody>
</table>
Thompson Corporation
FIXED ASSET AND DEPRECIATION SCHEDULE
For Fiscal Years Ended September 30, 20X6, and September 30, 20X7

<table>
<thead>
<tr>
<th>Assets</th>
<th>Acquisition Date</th>
<th>Cost</th>
<th>Salvage</th>
<th>Depreciation Method</th>
<th>Estimated Life in Years</th>
<th>Depreciation Expense Year Ended Sept. 30, 20X6</th>
<th>20X7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land A</td>
<td>October 1, 20X5</td>
<td>$ (1)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Building A</td>
<td>October 1, 20X5</td>
<td>(2)</td>
<td>$47,500</td>
<td>Straight Line</td>
<td>(3)</td>
<td>$14,000</td>
<td>$ (4)</td>
</tr>
<tr>
<td>Land B</td>
<td>October 2, 20X5</td>
<td>(5)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Building B</td>
<td>Under construction to date</td>
<td>210,000</td>
<td>—</td>
<td>Straight Line</td>
<td>Thirty</td>
<td>—</td>
<td>(6)</td>
</tr>
<tr>
<td>Donated Equipment</td>
<td>October 2, 20X5</td>
<td>(7)</td>
<td>2,000</td>
<td>150% Declining Balance</td>
<td>Ten</td>
<td>(8)</td>
<td>(9)</td>
</tr>
<tr>
<td>Machinery A</td>
<td>October 2, 20X5</td>
<td>(10)</td>
<td>5,500</td>
<td>Sum of Years' Digits</td>
<td>Ten</td>
<td>(11)</td>
<td>(12)</td>
</tr>
<tr>
<td>Machinery B</td>
<td>October 1, 20X6</td>
<td>(13)</td>
<td>—</td>
<td>Straight Line</td>
<td>Fifteen</td>
<td>—</td>
<td>(14)</td>
</tr>
<tr>
<td>N/A—Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Required:** For each numbered item (1) to (14), supply the correct amount. Round each answer to the nearest dollar. Do not recopy schedule. Show supporting computations in good form.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 
11. 
12. 
13. 
14. 

**Illustrative Solution:**

**Computations for Fixed Asset and Depreciation Schedule**

1. $65,000. Allocated in proportion to appraised values (72/900 × $812,500).
2. $747,500. Allocated in proportion to appraised values (828/900 × $812,500).
3. Fifty years. Cost less salvage ($747,500 – $47,500) divided by annual depreciation ($14,000).
4. $14,000. Same as prior year since it is straight-line depreciation.
5. $85,400. (Number of shares [3,000] times fair value [$25]) plus demolition cost of existing building ($10,400).
6. None. No depreciation before use.
7. $16,000. Fair market value.
8. $2,400. Cost ($16,000) times percentage (15%).
9. $2,040. Cost ($16,000) less prior year's depreciation ($2,400) equals $13,600. Multiply $13,600 times 15%.
10. $99,000. Total cost ($110,000) less repairs and maintenance ($11,000).
11. $17,000. Cost less salvage ($99,000 – $5,500) times 10/55.
12. $5,100. Cost less salvage ($99,000 – $5,500) times 9/55 times one-third of a year.
(13) $30,840. (Annual payment [$4,000] times present value of annuity at 8% for 10 years \(6.71\)) plus down payment ($4,000). This can be computed from an annuity due table since the payments are at the beginning of each year. To convert from an annuity in arrears to an annuity due factor, proceed as follows: For eleven payments use the present value in arrears for 10 years \(6.710\) plus 1.00. Multiply this factor \(7.710\) times $4,000 annual payment.

(14) $2,056. Cost ($30,840) divided by estimated life (15 years).

**Group and Composite Depreciation**

Depreciation on homogenous (group) assets or on heterogeneous (composite) assets with similar characteristics may be computed by compiling the assets into a single asset account for depreciation purposes. A rate is established based upon the average life of the assets in the account and the rate is applied to the balance in the asset account each period to compute the depreciation expense. A retirement of an asset is recorded by crediting the asset account for the original cost of the asset and debiting the accumulated depreciation account for the difference between the original cost and the proceeds received. **Gains and losses on retirements are not usually recognized.** A gain or loss is normally recognized only after the last asset within the group is retired.

**ASC 360—ACCOUNTING FOR THE IMPAIRMENT OR DISPOSAL OF LONG-LIVED ASSETS**

**Overview**

This statement supersedes SFAS 121. SFAS 121 looked at the impairment of the business as a whole, but with the release of ASC 360 on the impairment of goodwill, the statement became obsolete and necessitated the release of ASC 360 for the impairment of the rest of the assets.

**Concepts**

ASC 360 retains many of the concepts contained in SFAS 121. An impairment is recognized when the carrying amount of the long-lived asset or group of assets exceeds its fair market value and is not recoverable. Not recoverable means that the carrying amount is greater than the sum of the future undiscounted cash flows from the asset’s or group of assets’ use and eventual disposal.

If the asset is not recoverable, the firm recognizes an impairment loss for the difference between the carrying value and the fair value of the asset or group of assets.

**Indicators of Impairment**

The following indicators may indicate that impairment exists and an impairment test should be performed:

1. A series of operating or cash flow losses and an indication that future losses will continue.
2. A significant decrease in the market price of the asset(s).
3. A significant change in the asset(s) physical condition.
4. A significant change in the legal or business climate. Example: an unfavorable ruling by the EPA.

**Grouping of Long-Lived Assets**

Long-lived assets must be grouped at the lowest level at which there are identifiable cash flows. ASC 360 defines an asset group as, “assets to be disposed of together as a group in a single transaction and liabilities directly associated with these assets that will be transferred in the transaction.” Examples of asset groups are subsidiaries, reporting units, segments, and operating units.

As a general rule, goodwill should not be included in these asset groups because goodwill is tested separately in ASC 360.

**Primary Assets**

Testing a group of long-lived assets for recoverability (future undiscounted cash flows) presents a special problem because the assets within the group may have different useful lives. The ASC solved the problem with the designation of one asset within the group as the primary asset.
The calculation of the future undiscounted cash flows will be for the period of the remaining useful life of the primary asset. For example:

Company X’s asset group consists of assets A, B and C. A’s useful life is 6 years, B’s useful life is 5 years, and C’s useful life is 4 years. Company X designates Asset C as the primary asset. Therefore, the recoverability test will include undiscounted cash flows for four years plus the disposal value for each asset at the end of four years.

Estimating Fair Values
Fair value is an asset’s purchase or sales price in a current transaction between willing parties in an active market. If an active market does not exist, prices for similar assets may be used or the company can calculate the present value of future cash flows.

Disclosure of Impairment Losses
Impairment losses should be disclosed as a part of continuing operations. If continuing operations uses a subtotal such as operating income (multi-step format), impairment losses would be included in that amount.

Impairment Losses With a Group of Long-Lived Assets
An impairment loss associated with a group of long-lived assets must be allocated to the group on a pro-rata basis using their relative carrying values. For example, assume that the asset group A, B and C had the following carrying values and needed to record an impairment loss of $20,000.

<table>
<thead>
<tr>
<th>Asset</th>
<th>Carrying Value</th>
<th>Pro-Rata Share</th>
<th>Allocation of Loss</th>
<th>Adjusted Carrying Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$40,000</td>
<td>20%</td>
<td>($4,000)</td>
<td>$36,000</td>
</tr>
<tr>
<td>B</td>
<td>$60,000</td>
<td>30%</td>
<td>($6,000)</td>
<td>$54,000</td>
</tr>
<tr>
<td>C</td>
<td>$100,000</td>
<td>50%</td>
<td>($10,000)</td>
<td>$90,000</td>
</tr>
<tr>
<td>Total</td>
<td>$200,000</td>
<td>100%</td>
<td>($20,000)</td>
<td>$180,000</td>
</tr>
</tbody>
</table>

RESEARCH AND DEVELOPMENT COSTS—ASC 730

Under this statement all items defined as research and development (R&D) costs are to be expensed when incurred. The statement defines the inclusions and exclusions as to research and development costs as well as elements of cost to be identified as research and development activities.

Definition of R&D Costs
a. Research is planned search or critical investigation aimed at discovery of new knowledge with the hope that such knowledge will be useful in developing a new product or service (hereinafter "product") or a new process or technique (hereinafter "process") or in bringing about a significant improvement to an existing product or process.

b. Development is the translation of research findings or other knowledge into a plan or design for a new product or process or for a significant improvement to an existing product or process whether intended for sale or use. It includes the conceptual formulation, design, and testing of product alternatives, construction of prototypes, and operation of pilot plants. It does not include routine or periodic alterations to existing products, production lines, manufacturing processes, and other ongoing operations, even though those alterations may represent improvements, and it does not include market research or market testing activities.

Activities Included in R&D Costs
a. Laboratory research aimed at discovery of new knowledge.
b. Searching for applications of new research findings or other knowledge.
c. Conceptual formulation and design of possible product or process alternatives.
d. Testing in search for or evaluation of product or process alternatives.
e. Modification of the formulation or design of a product or process.
f. Design, construction, and testing of pre-production prototypes and models.
g. Design of tools, jigs, molds, and dies involving new technology.
h. Design, construction, and operation of a pilot plant that is not of a scale economically feasible to the enterprise for commercial production.

i. Engineering activity required to advance the design of a product to the point that it meets specific functional and economic requirements and is ready for manufacture.

**Exclusions from R&D Costs**

a. Engineering follow-through in an early phase of commercial production.
b. Quality control during commercial production, including routine testing of products.
c. Trouble-shooting in connection with breakdowns during commercial production.
d. Routine, ongoing efforts to refine, enrich, or otherwise improve upon the qualities of an existing product.
e. Adaptation of an existing capability to a particular requirement or customer's need as part of a continuing commercial activity.
f. Seasonal or other periodic design changes to existing products.
g. Routine design of tools, jigs, molds, and dies.
h. Activity, including design and construction engineering, related to the construction, relocation, rearrangements, or start-up of facilities or equipment other than (1) pilot plants (see paragraph h. above), and (2) facilities or equipment whose sole use is for a particular research and development project (see below).
i. Legal work in connection with patent applications or litigation, and the sale or licensing of patents.

**Elements of Costs Identified with R&D Activities**

a. **Materials, equipment, and facilities.** The costs of materials (whether from the enterprise's normal inventory or acquired specially for research and development activities) and equipment or facilities that are acquired or constructed for R&D activities and that have alternative future uses (in R&D projects or otherwise) shall be capitalized as tangible assets when acquired or constructed. The cost of such materials consumed in R&D activities and the depreciation of such equipment or facilities used in those activities are R&D costs. However, the costs of materials, equipment, or facilities that are acquired or constructed for a particular R&D project that have no alternative future uses (in other R&D projects or otherwise), and, therefore, no separate economic values, are R&D costs at the time the costs are incurred.

b. **Personnel.** Salaries, wages and other related costs of personnel engaged in R&D activities shall be included in R&D costs.

c. **Intangibles purchased from others.** The costs of intangibles that are purchased from others for use in R&D activities and that have alternative future uses (in R&D projects or otherwise) shall be capitalized and amortized as intangible assets in accordance with ASC 730. The amortization of those intangible assets used in R&D activities is an R&D cost. However, the costs of intangibles that are purchased from others for a particular R&D project and that have no alternative future uses (in other R&D projects or otherwise), and, therefore, no separate economic values, are R&D costs at the time the costs are incurred.

d. **Contract services.** The costs of services performed by others in connection with the R&D activities of an enterprise, including R&D conducted by others in behalf of the enterprise, shall be included in R&D costs.

e. **Indirect costs.** R&D costs shall include a reasonable allocation of indirect costs. However, general and administrative costs that are not clearly related to R&D activities shall not be included as R&D costs.

**Outside Funding—ASC 730**

When a research and development arrangement is funded by others and the enterprise is obligated to repay any of the funds provided by the other parties regardless of the outcome of the research and development, the enterprise shall estimate and recognize that liability.

To conclude that a liability does not exist, the transfer of the financial risk involved with research and development from the enterprise to the other parties must be substantive and genuine. To the extent that the enterprise is committed to repay any of the funds provided by the other parties regardless of the outcome of the research and development, all or part of the risk has not been transferred. If conditions suggest that it is probable (see ASC 730) that the enterprise will repay any of the funds regardless of the outcome of the research and development, there is a presumption that the enterprise has an obligation to repay the other parties. That presumption can be overcome only by substantial evidence to the contrary.

An enterprise that incurs a liability to repay the other parties shall charge the research and development costs to
expense as incurred. The amount of funds provided by the other parties might exceed the enterprise's liability. If so, the enterprise shall charge its portion of the research and development costs to expense in the same manner as the liability is incurred. For example, the liability might arise as the initial funds are expended, or the liability might arise on a pro rata basis.

ACCOUNTING FOR EXCHANGE OF NONMONETARY ASSETS - ASC 360

ASC 360 simplified the accounting for nonmonetary transactions. Its general rule states that fair value is the proper measure of exchanges of nonmonetary assets. Therefore, the fair value of the asset given up or the fair value of the asset received, whichever is more evident, should be used to account for a transaction and a gain or loss should be recognized immediately. The theory for the concept is that the transaction has “commercial substance”.

The ASC defines commercial substance as a change in cash flows as a result of the transaction. In other words, the economic position of the parties has changed. For example, ABC Company exchanged its fleet of company cars for a plot of land held by XYZ Corp. It is likely that the timing of the cash flows from the land will be significantly different from the cash flows from the company cars. Therefore, the economic positions of both parties have changed and the transaction has commercial substance.

EXCHANGE WITH COMMERCIAL SUBSTANCE – GAIN

Assume that ABC Company’s fleet of cars was recorded at a cost of $140,000 with accumulated depreciation of $60,000. The cars, along with a cash payment of $50,000, were exchanged for land with a fair value of $160,000.

JOURNAL ENTRY

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>160,000</td>
</tr>
<tr>
<td>Accumulated Depreciation</td>
<td>60,000</td>
</tr>
<tr>
<td>Company Cars (Cost)</td>
<td>140,000</td>
</tr>
<tr>
<td>Cash</td>
<td>50,000</td>
</tr>
<tr>
<td>Gain on Exchange</td>
<td>30,000</td>
</tr>
</tbody>
</table>

Note: Key point is that the land should be recorded at fair value.

EXCHANGE WITH COMMERCIAL SUBSTANCE – LOSS

ABC exchanged its company cars for a fleet of cars with a significantly longer useful life. The cash flows on the new fleet of cars should be different and the company is in a different economic position. Therefore, the transaction has commercial substance. Assume that ABC trades its company cars which cost $140,000 and had accumulated depreciation of $80,000 for a fleet of cars with a fair value of $130,000 and pays a cash difference of $90,000.

JOURNAL ENTRY

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Cars (new)</td>
<td>130,000</td>
</tr>
<tr>
<td>Accumulated Depreciation</td>
<td>80,000</td>
</tr>
<tr>
<td>Loss on Exchange of Company Cars</td>
<td>20,000</td>
</tr>
<tr>
<td>Company Cars (old)</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
</tr>
</tbody>
</table>

Note: New fleet of cars is recorded at fair value.

EXCHANGE WITH COMMERCIAL SUBSTANCE – FAIR VALUES CANNOT BE ESTIMATED
Even though a transaction has commercial substance, if the fair value of the asset received or the fair value given up cannot be estimated because of the specialized nature of the item, the new asset should be recorded at the book value of the asset(s) given up and a gain or loss should not be recognized.

ABC exchanged a machine that was carried on its books at a cost of $50,000 with an accumulated depreciation of $30,000. Because of the specialized nature of the machines, it is impossible to objectively determine the fair value of either machine. Even though the transaction has commercial substance it is not possible to calculate a gain or loss on the transaction because the fair values can not be determined. Therefore, the “cost” of the new machine is the book value of the machine traded.

<table>
<thead>
<tr>
<th>JE</th>
<th>Machine (new)</th>
<th>20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accumulated depreciation</td>
<td>30,000</td>
</tr>
<tr>
<td></td>
<td>Machine (old)</td>
<td>50,000</td>
</tr>
</tbody>
</table>

**LACKS COMMERCIAL SUBSTANCE – LOSS TRANSACTION – FAIR VALUES DETERMINABLE**

If a transaction for nonmonetary assets lacks commercial substance and a loss is indicated, conservatism dictates that the loss should be recognized and the asset received should be recorded at the fair value of the asset received or the fair value of the asset(s) traded whichever is more evident.

**EXAMPLE:**

ABC traded its machine which it carried on its books at a cost of $4,000 and an accumulated depreciation of $1,600 for a similar machine with a fair value of $2,000. Since the machines are similar and the economic position of ABC has not changed, the transaction lacks commercial substance. A loss of $400 is indicated because ABC gave up a machine with a carrying value of $2,400 ($4,000 cost - $1,600 accumulated depreciation) for a machine with a fair value of $2,000. The loss should be recognized (conservatism) and the new machine recorded at fair value of $2,000.

<table>
<thead>
<tr>
<th>JE</th>
<th>Machine (new)</th>
<th>2,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Loss on trade of machine</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>Accumulated depreciation</td>
<td>1,600</td>
</tr>
<tr>
<td></td>
<td>Machine (old)</td>
<td>4,000</td>
</tr>
</tbody>
</table>

**TRANSACTION LACKS COMMERCIAL SUBSTANCE – THEORETICAL GAIN, FAIR VALUES ARE DETERMINABLE AND NO CASH**

A transaction that lacks commercial substance and does not change the economic position of the company is an exception to the concept of recording the asset received at fair value. In this case, the asset received should be recorded at the book value of the asset(s) given up and a gain should not be recorded.

**EXAMPLE**

ABC Realty Company owns four acres of land, with a cost of $100,000 on the west side of the city and XYZ Realty owns three acres, with a cost of $90,000 on the east side of town. Both plots of land have a fair value of $130,000. Economic development consultants hired by both firms recommend that a strip mall be built on the east side of town and apartment catering to young adults be build on the west side of the city.

Since ABC is more comfortable building strip malls and XYZ, apartments, they swap plots of land. Their economic positions remain the same and there should be not a significant change in cash flows. Therefore, the transaction lacks commercial substance. The “cost” of the new land on ABC’s books should be the book value of the land traded and the theoretical gain of $30,000 (fair value of $130,000 vs cost of $100,000) should not be recognized.

**JOURNAL ENTRY**
ABC Company exchanged a number of used cars plus cash ($10,000) for land to be used as a future plant site. The cars have a cost of $70,000 and an accumulated depreciation of $40,000 for a carrying value of $30,000. ABC determined that the fair value of the cars was $35,000 and that the transaction lacks commercial substance. In other words, the economic position of ABC did change significantly as a result of this transaction.

The accounting for this type of transaction is to defer the theoretical gain because the transaction lacks commercial substance and to record the new asset (land) at the book value of the assets given up. The calculation of the theoretical gain is to compare the fair value of the cars ($35,000) vs their carrying value ($30,000) for a theoretical gain of $5,000. The book value of the assets given up is the carrying value of the cars ($30,000) plus the cash paid ($10,000) for a “cost” of the land of $40,000.

The short-cut approach follows two simple rules: using the formula listed below, calculate the portion of the gain recognized and plug the journal entry.

\[
\text{Portion of Gain Recognized} = \frac{\text{Cash Received}}{\text{Cash Received} + \text{Fair Value of Asset Received}} \times \text{Gain}
\]

\[
= \frac{\$10,000}{\$10,000 + \text{Fair Value of Asset Received}} \times \text{Gain}
\]
$10,000 + $90,000 \times $40,000 = $4000

PLUG THE JOURNAL ENTRY

<table>
<thead>
<tr>
<th>JE</th>
<th>Cash</th>
<th>10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine (new) Plug</td>
<td>54,000</td>
<td></td>
</tr>
<tr>
<td>Accumulated Depreciation</td>
<td>55,000</td>
<td></td>
</tr>
<tr>
<td>Machine (old)</td>
<td>115,000</td>
<td></td>
</tr>
<tr>
<td>Gain on trade of machine</td>
<td>4,000</td>
<td></td>
</tr>
</tbody>
</table>

This approach is simple but does not explain the logic behind the transaction. The theoretical approach explains the FASB’s rationale for recording the transaction.

The theoretical approach assumes that since cash was received a portion of the book value of the asset was sold and a gain should be recognized on the portion sold.

It also assumes that the portion of the book value not sold was traded. Since the transaction lacks commercial substance, a gain should not be recognized on the portion of the book value traded. The portion of the book value traded then becomes the “cost” of the new asset.

CALCULATION OF GAIN ON PORTION OF ASSET SOLD

<table>
<thead>
<tr>
<th>Cash Received + FV Received</th>
<th>Book Value of Asset Traded</th>
<th>Portion Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000 + 90,000</td>
<td>$60,000</td>
<td>$6,000</td>
</tr>
</tbody>
</table>

Since ABC received cash of $10,000 for the portion sold ($6,000) the company should recognize a gain of $4,000.

CALCULATION OF THE PORTION OF THE BOOK VALUE TRADED

Since ABC sold 1/10 of the book value of the asset traded, it must have traded 9/10 of the book value.

<table>
<thead>
<tr>
<th>9</th>
<th>BOOK VALUE OF ASSET TRADED</th>
<th>PORTION TRADED</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>X</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

Since the transaction lacks commercial substance, the gain on the portion of the asset traded should be deferred (not recognized) and the “cost” of the new asset should be the book value of the portion traded ($54,000).

PLEASE GO BACK AND REVIEW THE JOURNAL ENTRY!
QUICK SUMMARY OF THE RULES FOR NONMONETARY TRANSACTIONS

For nonmonetary transactions that HAVE COMMERCIAL SUBSTANCE, the new asset received should be recorded at the FAIR VALUE of the asset(s) given up or the fair value of the asset(s) received whichever is more evident and a gain or loss recognized on the transaction. The theory is that the future cash flows and/or the economic position of the company have changed significantly.

For nonmonetary transactions that LACK COMMERCIAL SUBSTANCE and a LOSS is indicated, the loss should be recognized immediately and the asset received should be recorded at the FAIR VALUE of the asset(s) given up or the fair value of the asset(s) received whichever is more evident. The theory is conservatism.

For nonmonetary transactions that LACK COMMERCIAL SUBSTANCE, a GAIN is indicated, and CASH is not involved or CASH IS PAID. The gain is deferred and the new asset is recorded at the book value of the asset(s) given up. The theory is that there has not been a significant change in future cash flows and/or economic position of the company.

For nonmonetary transactions that LACK COMMERCIAL SUBSTANCE, a GAIN is indicated, and CASH IS RECEIVED. A gain is recognized on a portion of the asset sold and the “cost” of the new asset received is the book value of the portion of the asset that is assumed to have been traded.

The theory is that a portion of the asset was “sold” and a gain should be recognized. The book value of the portion traded should be the “cost” of the new asset because the future cash flows and/or the economic position of the company have not changed significantly (lacks commercial substance).

VISUAL SUMMARY OF NONMONETARY TRANSACTIONS RULES

<table>
<thead>
<tr>
<th>Exchange Transaction</th>
<th>Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Has commercial substance &amp; fair values are determinable</td>
<td>Record new asset at fair value given up or fair value received, whichever is more evident and a record gain or loss immediately</td>
</tr>
<tr>
<td>B. Has commercial substance &amp; fair values are not determinable</td>
<td>Record new asset at book value of asset(s) given up. No gain or loss is recorded.</td>
</tr>
<tr>
<td>C. Lacks commercial substance</td>
<td>Record loss (Conservatism)</td>
</tr>
<tr>
<td>Loss Transaction</td>
<td>Record new asset at fair value given up or fair value received, whichever is more evident</td>
</tr>
<tr>
<td>Fair values determinable</td>
<td></td>
</tr>
<tr>
<td>D. Lacks commercial substance</td>
<td>Record new asset at book value of assets given up. Do not recognize the theoretical gain</td>
</tr>
<tr>
<td>Theoretical Gain</td>
<td></td>
</tr>
<tr>
<td>No cash or paid cash</td>
<td></td>
</tr>
<tr>
<td>Fair values determinable</td>
<td></td>
</tr>
<tr>
<td>E. Lacks commercial substance</td>
<td>Record partial gain</td>
</tr>
<tr>
<td>Theoretical Gain</td>
<td>New asset should be recorded at the book value of the portion of the asset traded</td>
</tr>
<tr>
<td>Receive cash</td>
<td></td>
</tr>
<tr>
<td>Fair values determinable</td>
<td></td>
</tr>
</tbody>
</table>

11-17
INTANGIBLE ASSETS

ASC 350 and Goodwill
ASC 350 provides two major changes in financial reporting related to business combinations. The first major change is that goodwill will no longer be amortized systematically over time. This non-amortization approach will be applied to both previously recognized and newly acquired goodwill. In the second major change, goodwill will be subject to an annual test for impairment. When the carrying amount of goodwill exceeds its implied fair value, an impairment loss is recognized equal to that excess. (see Chapter 4)

ASC 350 and Other Intangible Assets
ASC 350 recommends that all identified intangible assets should be amortized over their economic useful life, unless such life is considered indefinite. The term indefinite life is defined as a life that extends beyond the foreseeable future. A recognized intangible asset with an indefinite life should not be amortized unless and until its life is determined to be finite. Importantly, indefinite does not mean infinite. Also, the useful life on an intangible asset should not be considered indefinite because a precise finite life is not known.

For those intangible assets with finite lives, the method of amortization should reflect the pattern of decline in the economic usefulness of the asset. If no such pattern is apparent, the straight-line method of amortization should be used. The amount to be amortized should be the value assigned to the intangible asset less any residual value. In most cases the residual value is presumed to be zero. However, that presumption may be overcome if the acquiring enterprise has a commitment from a third party to purchase the intangible at the end of its useful life, or an observable market exists for the intangible asset that provides a basis for estimating a terminal value.

The length of the amortization period for identifiable intangibles (i.e., those not included in goodwill), depends primarily on the assumed economic life of the asset. Factors that should be considered in determining the useful life of an intangible asset include
• Legal, regulatory, or contractual provisions
• The effects of obsolescence, demand, competition, industry stability, rate of technological change, and expected changes in distribution channels
• The expected use of the intangible asset by the enterprise
• The level of maintenance expenditure required to obtain the asset’s expected future benefits

Note: ASC 350 eliminated the arbitrary limit of 40 years for amortization of intangibles.

Any recognized intangible assets considered to possess indefinite lives are not amortized but instead are tested for impairment on an annual basis. To test for impairment, the carrying amount of the intangible asset is compared to its fair value. If the fair value is less than the carrying amount, then the intangible asset is considered impaired and an impairment loss is recognized and the asset’s carrying value is reduced accordingly.

Internally Generated Cost of Intangibles
The cost of developing, maintaining, or restoring intangible assets which are not specifically identifiable, have indeterminate lives, or are inherent in a continuing business, should be expensed.

ASC 350 Intangible Asset Disclosure
For intangible assets acquired either individually or with a group of assets, the following information shall be disclosed in the notes to the financial statements in the period of acquisition:

a. For intangible assets subject to amortization:
   1. The total amount assigned and the amount assigned to any major intangible asset class
   2. The amount of any significant residual value, in total and by major intangible asset class
   3. The weighted-average amortization period, in total and by major intangible asset class

b. For intangible assets not subject to amortization, the total amount assigned and the amount assigned to any major intangible asset class

c. The amount of research and development assets acquired and written off in the period and the line item in the income statement in which the amounts written off are aggregated.
The following information shall be disclosed in the financial statements or the notes to the financial statements for each period for which a statement of financial position is presented:

a. For intangible assets subject to amortization:
   1. The gross carrying amount and accumulated amortization, in total and by major intangible asset class
   2. The aggregate amortization expense for the period
   3. The estimated aggregate amortization expense for each of the five succeeding fiscal years

b. For intangible assets not subject to amortization, the total carrying amount and the carrying amount for each major intangible asset class

ORGANIZATION COST AND COST OF START-UP ACTIVITIES – ASC 350

In 1998 the AICPA decided that organizational cost and start-up cost should be expensed as incurred. For entities that had capitalized organizational cost in the past, the adoption of the new method should be reported as the cumulative effect of a change in accounting principle, but entities are not required to report the pro forma effects of retroactive application.

CAPITALIZATION OF INTEREST COST— ASC 350

Material interest costs incurred by a firm for assets constructed or produced for its use or assets which are intended to be leased or sold should be capitalized as part of the cost of the asset. Interest is not to be capitalized for routinely manufactured inventories, inventories produced in large quantities (inventories requiring aging, for example), assets which are ready for use, or assets which are not yet ready for use but are not in the process of completion (a building which is one-half completed but construction is halted due to litigation). In this case, interest would continue to be capitalized when construction continues.

Interest costs are initially capitalized during planning stages and capitalization continues even if such capitalization raises the asset cost above market value. (The reduction of the asset to market is a separate accounting transaction.)

The amount of interest to be capitalized is based upon the Company's actual borrowings. The amount to be capitalized is that portion of interest incurred during the construction or acquisition period which could have been avoided had the assets not been acquired. If there is a specific borrowing related to the qualifying asset, the interest on such borrowing is the amount used. If the borrowing is less than the cost of the asset, then the interest capitalized for the excess is the amount paid for recent borrowings. If the Company has no specific or other recent borrowings, then the rate to be used is the average rate of old borrowings. When computing the amount of interest to be capitalized, such interest should be compounded; i.e., the amount is based on all costs previously incurred including interest. The amount of interest to be capitalized cannot exceed the total interest cost for the period, both of which must be disclosed.

FORMULA FOR CAPITALIZATION OF INTEREST

\[
\text{Average accumulated expenditures during construction} \times \text{Appropriate Interest Rate} \times \text{Construction Period}
\]

Example:
X Company began construction of a new plant on January 1, 20X6, and the expenditures incurred evenly throughout the year totaled $4,000,000 on December 31. X Company had the following debt structure at year-end.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgage on plant under construction at an 8% interest rate</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>Other borrowings at a weighted average interest rate of 10%</td>
<td>800,000</td>
</tr>
</tbody>
</table>
Calculation of Average Accumulated Expenditures for 1999:

\[
\frac{\text{January 1 total expenditures} + \text{December 31 total expenditures}}{2} = \frac{0 + \$4,000,000}{2} = \$2,000,000 \text{ Average accumulated expenditures}
\]

Formula Amount of Capitalized Interest:

<table>
<thead>
<tr>
<th>Average accumulated expenditures during construction</th>
<th>X</th>
<th>Appropriate Interest Rate</th>
<th>X</th>
<th>Construction Period</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,500,000* 500,000</td>
<td>X</td>
<td>8% mortgage rate</td>
<td>X</td>
<td>1 year</td>
<td>$120,000</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>10% other interest rate</td>
<td>X</td>
<td>1 year</td>
<td>$50,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>formula amount of interest capitalized</td>
</tr>
</tbody>
</table>

*The steps used in selecting the interest rates for the $2,000,000 of average accumulated expenditures are to first use the 8% interest rate on the $1,500,000 mortgage and then use the 10% interest rate on the other borrowings for the remaining $500,000.

Calculation of Actual Interest Cost:

\[
\text{Mortgage Interest} = \$1,500,000 \times 8\% \times 1 \text{ year} = \$120,000
\]

\[
\text{Other borrowings} = \$800,000 \times 10\% \times 1 \text{ year} = \$80,000
\]

Actual interest cost = $200,000

The amount of interest capitalized is the lower of the formula amount of interest and the actual interest. In this case the formula amount of interest is lower and the amount capitalized would be $170,000.

INTEREST ON RECEIVABLES AND PAYABLES—ASC 310

How should a note receivable or note payable be recorded when the face amount does not represent the present value of the consideration given or received in the exchange?

Example: A Co. gives B Co. a note for $5,000 as payment for equipment which has a fair or cash value of $3,500. The note is to be paid $1,000 per year with no interest stipulated. In such case the note should be recorded at the fair value of the equipment or the market value of the note. This requires recognition of the interest element which exists in the transaction.

Entry for A. Co.:

- Equipment $3,500
- Discount on N/P $1,500
- Notes Payable $5,000

Entry for B Co.:

- N/R $5,000
- Discount on N/R $1,500
- Sales $3,500

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As the periodic payments are made by A to B, A will recognize interest expense and B will recognize interest income. (Note: This example presumes that both parties recognize the interest element involved and record the transaction correctly. There is no requirement that parties to a transaction coordinate the entries.)

**Scope of ASC 310**

The opinion does **not** apply to the following situations:

a. Receivables and payables arising from transactions with customers or suppliers in the normal course of business which are due in customary trade terms not exceeding approximately one year;

b. amounts which do not require repayment in the future, but rather will be applied to the purchase price of the property, goods, or service involved (e.g., deposits or progress payments on construction contracts, advance payments for acquisition of resources and raw materials, advances to encourage exploration in the extractive industries);

c. amounts intended to provide security for one party to an agreement (e.g., security deposits, retainages on contracts);

d. the customary cash lending activities and demand or savings deposit activities of financial institutions whose primary business is lending money;

e. transactions where interest rates are affected by the tax attributes or legal restrictions prescribed by a governmental agency (e.g., industrial revenue bonds, tax exempt obligations, government guaranteed obligations, income tax settlements); and

f. transactions between parent and subsidiaries and between subsidiaries of a common parent.

The opinion **applies** to situations which otherwise qualify where the debt instrument contains no provision for interest or an unrealistic interest rate.

**Note Exchanged for Cash**

A note issued or received for cash with no other right or privilege exchanged has a value equal to the cash proceeds. **Example**: A loans B $10,000 at 4% interest. The rate for similar loans at the time of the transaction is 9%. No other rights or privileges are included in the exchange. The note would be recorded at the $10,000 amount and the interest at 4%.

**Other Rights or Privileges Included**

When unstated rights or privileges are exchanged along with a note, such items should be given accounting recognition.

**Example**: On January 1, Sell Co. received a 5-year $100,000 interest-free loan from Buy, Inc., in exchange for a contract to supply spare parts at a certain price for five years. Sell Co. normally would pay 10% for the use of the funds. The present value of 1 at 10% for five periods is .62092. Sell should record the loan in the following manner:

\[
\begin{align*}
\text{Cash} & : $100,000 \\
\text{Discount on Note Payable} & : 37,908 \\
\text{Note Payable} & : $100,000 \\
\text{Unearned Income} & : 37,908
\end{align*}
\]

Calculations:

\[\text{Present Value of Note} = \frac{100,000 \times .62092}{100,000} = 62,092\]

\[\text{Discount on Note} = 100,000 - 62,092 = 37,908\]

\[\text{Unearned Income} = \text{Amortized over the life of the contract}\]

During the year, Sell Co. sold an estimated 10% of the amount to be involved in the 5-year contract and amortized 10% of the unearned income.

\[\text{Unearned Income} = 3,791\]

\[\text{Sales} = 3,791\]

At year end, Sell Co. recorded interest as follows:

\[\begin{align*}
\text{Interest Expense} & : 6,209 \\
\text{Discount on Note Payable} & : 6,209
\end{align*}\]

Sell Co. would show the following for Notes Payable:
Notes Payable $100,000
Less Discount 31,699 ($37,908 – 6,209)
$ 68,301

Note Exchanged for Property, Goods, or Service

There is a general presumption that the stated interest rate represents fair and adequate compensation for the goods or services. This does not apply, however, if (1) interest is not stated, (2) is unreasonable, or (3) the stated face amount of the note is materially different from the current cash sales price for the same or similar items or from the market value of the note at the date of the transaction.

In such cases, the property exchanged for the note should be recorded at the fair value of the property or note, whichever is more clearly determinable. Any resulting discount or premium should, of course, be accounted for as interest using an imputed rate.

1. Asset acquired for note—periodic payments

An asset was acquired in exchange for a $100,000 note, payable $10,000 a year for 10 years. The interest for similar risks is 6%. The present value of an ordinary annuity of 1 at 6% for 10 periods is 7.36.

Face amount $100,000
P.V. of ten $10,000 payments over a 10-year period at 6% 73,600
Discount—to be amortized as interest expense $26,400

1st year:
Amount of note $73,600
Payment $10,000
Interest @ 6% 4,416
5,584

5th year:
Amount of note $42,123
Payment $10,000
Interest @ 6% 2,528
7,472

Last Payment:
Amount of note $ 9,433
Interest @ 6% 567
Payment $10,000

Recording the Asset

Asset $73,600
Note discount 26,400
Notes Payable $100,000

Stacking machine purchased for $100,000 to be paid over 10 years @ $10,000 per year.

Balance Sheet Presentation

<table>
<thead>
<tr>
<th></th>
<th>Year 0</th>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes Payable</td>
<td>$100,000</td>
<td>$90,000</td>
</tr>
<tr>
<td>Less: Discount on Note Payable</td>
<td>26,400</td>
<td>21,984</td>
</tr>
<tr>
<td></td>
<td>$ 73,600</td>
<td>$68,016</td>
</tr>
</tbody>
</table>

Entry to record first payment
Interest Expense $4,416
Notes Payable 10,000
Cash $10,000
Note discount 4,416

First payment of $10,000 on Note Payable
Interest at 6% × $73,600
2. **Asset acquired for note—lump sum payment**

The same asset was acquired for a $100,000 note to be paid in a lump sum at the end of 10 years. The present value of 1 at 6% for 10 periods is .5584.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face amount</td>
<td>$100,000</td>
</tr>
<tr>
<td>P.V. of one $100,000 payment to be paid in 10 years</td>
<td>55,840</td>
</tr>
<tr>
<td>Discount—to be amortized as interest expense</td>
<td>$44,160</td>
</tr>
</tbody>
</table>

**1st year:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of note</td>
<td>$55,840</td>
</tr>
<tr>
<td>Interest payable at 6%</td>
<td>3,350</td>
</tr>
<tr>
<td>Total payable</td>
<td>$59,190</td>
</tr>
</tbody>
</table>

**2nd year:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest payable at 6%</td>
<td>3,551</td>
</tr>
<tr>
<td>Total payable</td>
<td>$62,741</td>
</tr>
</tbody>
</table>

Note: The amount payable at the end of any year can be obtained from "present value of 1" interest tables.

**10th year:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of note</td>
<td>$55,840</td>
</tr>
<tr>
<td>Nine years' interest</td>
<td>38,500</td>
</tr>
<tr>
<td>Interest at 6%</td>
<td>5,660</td>
</tr>
<tr>
<td>Total amount payable</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

**Recording the Asset**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset</td>
<td>$55,840</td>
</tr>
<tr>
<td>Note discount</td>
<td>44,160</td>
</tr>
<tr>
<td>Notes Payable</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

Stacking machine purchased for $100,000 to be paid at the end of 10 years.

**Balance Sheet Presentation**

<table>
<thead>
<tr>
<th>Description</th>
<th>Year 0</th>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes Payable</td>
<td>$100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Less: Discount on Notes Payable</td>
<td>44,160</td>
<td>40,810</td>
</tr>
<tr>
<td></td>
<td>$55,840</td>
<td>$59,190</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>$3,350</td>
<td></td>
</tr>
<tr>
<td>Note discount</td>
<td></td>
<td>$3,350</td>
</tr>
</tbody>
</table>

Amortization of note discount for year 1—6% × 55,840

**Statement Presentation of Discount and Premium**

The discount or premium resulting from the determination of present value in cash or noncash transactions is not an asset or liability separable from the note which gives rise to it. Therefore, the discount or premium should be reported in the balance sheet as a direct deduction from or addition to the face amount of the note. It should not be classified as a deferred charge or deferred credit. The description of the note should include the effective interest rate; the face amount should also be disclosed in the financial statements or in the notes to the statements. Amortization of discount or premium should be reported as interest in the statement of income. Issue costs should be reported in the balance sheet as deferred charges.

**Discounting a Note Receivable**

When a company discounts a note which it is holding, the proceeds are determined by taking the (bank's) discount rate and applying it against the maturity value of the note for the period the bank will be holding the note. This amount is the bank's discount and is subtracted from the maturity value to arrive at the proceeds.
Example:
Terms of note: $10,000, 12% 90-day note
Discounted after 30 days
Maturity value: $10,300 ($10,000 \times 12\% \times 90/360)
Bank's discount rate = 15%
$10,300 \times 15\% \times 60/360 = $257.50
Proceeds = $10,300 – 257.50 = $10,042.50

RELATED PARTY DISCLOSURES—ASC 405

ASC 405 established formal requirements for disclosures which are to be made of material related party transactions (not compensation). Related party transactions include those between the company and its parent, subsidiary, (also between subsidiaries of a common parent), principal owners or management (including their families), affiliates, or a pension trust managed by the company.

Required disclosures do not include transactions which are eliminated in consolidation but include:

a. The nature of the relationship.
b. A description of the transaction (includes transactions to which no or small amounts are ascribed).
c. Other information necessary to understand the effects of the transactions or the financial statements.
d. Amounts of the transactions for each period and the effects of any change in the method of establishing the terms from that used in the preceding period.
e. Balance due from or to related parties at balance sheet date for each balance sheet presented.
f. Nature of control relationships when reporting company and one or more other companies are under common control; (applies even if no transactions between companies) if such common control could result in financial results significantly different than those that would have been obtained if the companies were autonomous.

In addition, companies may not imply that related party transactions were on terms equivalent to those as if they were at arm's length (unless such representations can be substantiated).

ACCOUNTING FOR COMPENSATED ABSENCES—ASC 710

An employer shall accrue a liability for employees' compensation for future absences if all of the following conditions are met:

(a) The employer's obligation relating to employees' rights to receive compensation for future absences is attributable to employees' services already rendered.
(b) The obligation relates to rights that vest or accumulate.
(c) Payment of the compensation is probable, and
(d) The amount can be reasonably estimated.

If an employer meets conditions (a), (b), and (c) and does not accrue a liability because condition (d) is not met, that fact shall be disclosed.

Notwithstanding the conditions specified above, an employer is not required to accrue a liability for nonvesting accumulating rights to receive sick pay benefits (that is, compensation for an employee's absence due to illness) since the lower degree of reliability of estimates of future sick pay does not justify such an accrual.

Statement of Financial Accounting Standards ASC 410

Accounting for Asset Retirement Obligations

In FASB's words, ASC 410 stated objective is to “establish accounting standards for recognition and measurement of a liability for an asset retirement obligation and an associated asset retirement cost.”

ASC 410 applies to tangible long-lived assets, including individual assets, functional groups of related assets and significant parts of assets. It covers a company’s legal obligations resulting from the acquisition, construction, development or normal operation of a capital asset.
Basic Approach

- A business must recognize an asset retirement obligation for a long-lived asset at the point an obligating event takes place – provided it can reasonably estimate its fair value (or at the earliest date it can make a reasonable estimate).
- The entity must record the obligation at its fair value, either the amount at which the liability could be settled in a current transaction between willing parties in an active market, or – more likely—at a substitute for market value, such as the present value of the estimated future cash flows required to satisfy the obligation.
- To offset the credit portion of the asset retirement liability entry, businesses must capitalize the asset retirement costs as an increase in the carrying amount of the related long-term asset.
- Businesses must include certain costs in the income statement during the asset’s life—namely depreciation on the asset, including additional capitalized retirement costs, and interest for the accretion of the asset retirement liability due to the passage of time.

This statement is particularly applicable to industries such as oil refineries, electric power plants and mines which all have unusually long lives. Therefore, the calculation of the fair value of the retirement obligation will probably be based on projections of the present value of future cash flows using educated guesses about inflation, labor cost, technological advances and profit margins. This discount rate used is what the FASB calls a credit-adjusted risk-free rate. Therefore, the effect of the entity’s credit standing is reflected in the discount rate rather than in the estimated cash flows.

Example:
- XYZ purchases an asset for $1,000,000
- Company incurs an obligation upon installation to retire the asset
- Straight-line depreciation over a 10-year life
- 10% credit-adjusted risk-free discount rate
- Because of the difficulty in projecting cash flows the company used three different estimates and weights them based on probability.

<table>
<thead>
<tr>
<th>Estimates</th>
<th>Year 10</th>
<th>Probability</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>300,000</td>
<td>20%</td>
<td>$60,000</td>
</tr>
<tr>
<td>2</td>
<td>500,000</td>
<td>60%</td>
<td>300,000</td>
</tr>
<tr>
<td>3</td>
<td>550,000</td>
<td>20%</td>
<td>110,000</td>
</tr>
</tbody>
</table>

Expected cash outflow = $470,000

Present value at 10% =

\[
470,000 \times \text{pv of } $1 \times 0.38554 = \$181,204
\]

XYZ would make the following journal entries to record the purchase of the asset and record the asset retirement liability:

<table>
<thead>
<tr>
<th>JE</th>
<th>Tangible Asset (cost)</th>
<th>1,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cash</td>
<td>1,000,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JE</th>
<th>Tangible Asset</th>
<th>181,204</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Asset Retirement Liability</td>
<td>181,204</td>
</tr>
</tbody>
</table>

At the end of the first year the following entries would be made:

<table>
<thead>
<tr>
<th>JE</th>
<th>Depreciation Expense</th>
<th>118,120</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accumulated Depreciation</td>
<td>$1,181,204 / 10 years = $118,120</td>
</tr>
</tbody>
</table>

| JE | Interest Expense (accretion) | 18,120 |

11-25
Note: The increase in the asset retirement liability will total $470,000 at the end of 10 years.

This is similar to our recording of a non-interest bearing note payable earlier in the chapter.

**Disclosures**
An entity shall disclose the following information about its asset retirement obligations:

- A general description of the asset retirement obligations and the associated long-lived assets
- The fair value of assets that are legally restricted for purposes of settling asset retirement obligations
- A reconciliation of the beginning and ending aggregate carrying amount of asset retirement obligations showing separately the changes attributable to
  1. liabilities incurred in the current period
  2. liabilities settled in the current period
  3. accretion expense
  4. revisions in estimated cash flows, whenever there is a significant change in one or more of those four components during the reporting period.

If the fair value of an asset retirement obligation cannot be reasonably estimated, that fact and the reasons therefor shall be disclosed.

**IFRS**

**FINANCIAL STATEMENTS**

Under IFRS the statement of financial position (Balance Sheet) is very similar to the US in terms of definitions of accounts. IFRS does not require a specific format. It may be similar to the US or it may be radically different. For example, some companies use an “upside down” format. A synopsis of that format follows:

```
Goodwill XXX
Intangible Assets XXX
Tangible Assets XXX
   Total Fixed Assets XXX

Inventory XXX
Accounts Receivable XXX
Cash XXX
   Total Current Assets XXX

Liabilities XXX
Stockholder’s Equity XXX
```

There may be some terminology differences:

- Stock = Inventory
- Debtors = Accounts Receivable
- Creditors = Accounts Payable

The only significant difference is on the refinancing of a current liability such as bonds done to be retired next year. Under IFRS, if an agreement to refinance the bonds is executed prior to the financial statement date bonds are classified as noncurrent. In the US, the bonds are classified as noncurrent if there is intent and ability to refinance the bonds before the issuance of the financial statements.

**FAST TRACK SUMMARY**
FIXED ASSETS

Some of the most significant differences between IFRS and US GAAP occur in the fixed asset (noncurrent asset) area. Under IFRS the non-current assets are usually broken down into the following categories:

1. Property, Plant and Equipment
2. Investment Property
3. Intangible Assets
4. Biological Assets

PROPERTY, PLANT AND EQUIPMENT

Like in the US, property, plant and equipment are tangible assets used in the productive process. They are recorded initially at cost. Cost is usually defined as all necessary cost to purchase the asset and get it ready for its intended use. Once the asset is recorded at cost, the entity must decide whether to continue to use the cost model or to switch to the revaluation model.

The revaluation model requires that long-lived assets must be divided into asset classes. Examples would be land, buildings, equipment, automobiles, trucks, furniture and fixtures. The choice between the cost model and the revaluation model must be decided for each class of assets. Different valuation models may be used between the classes but once a valuation model is chosen, all the assets in that class must use the same valuation model.

REVALUATION MODEL

1. When an asset is revalued, the carrying value of the asset is the fair value at the data of the revaluation.
2. This revaluation is adjusted in the future for the accumulated depreciation and accumulated impairment losses.
3. The revaluation process is applied to assets that can be “reliably measured”.
4. The revaluation process usually involves an appraisal.
5. IFRS does not state how often the revaluations must be done. It is left up to the judgment of the entity to have the appraisal done regularly. The revaluations do not have to be done annually.
6. When the revaluation model is used on older assets, the accumulated depreciation can be adjusted proportionately or the accumulated depreciation can be eliminated and the asset recorded at the revaluation amount.
7. When an asset is revalued, the asset is written up or down. This up or down adjustment is recorded as a revaluation surplus account which is reported as a part of other comprehensive income.
8. When the asset is sold, a gain or loss is recognized and any remaining balance in revaluation surplus is transferred to retained earnings.

Under IFRS depreciation is similar to the US and the straight-line declining, balance and units of production methods are acceptable.

COMPONENT DEPRECIATION

IFRS requires that component depreciation be used. For example, ABC buys a huge dump truck at a cost of $200,000. The truck has special tires that have to be replaced every two years at a cost of $25,000. Under IFRS, the

<table>
<thead>
<tr>
<th>IFRS</th>
<th>US GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refinancing Agreement to finance is executed prior to financial statement data</td>
<td>Intent and ability to refinance prior to issuance of financial statements</td>
</tr>
</tbody>
</table>
truck and tires would be two asset components and would have to be depreciated separately. The US does not have
this requirement.

**NONMONETARY TRANSACTIONS** are the same for IFRS and the US.

**INVESTMENT PROPERTY**
IFRS40 defines investment property as property held to earn rentals or for capital appreciation. Examples would be
rental property or land held as an investment. Investment property is initially measured at cost. After the initial
recording of the investment property at cost, a decision must be made to continue with the cost model or move to the
fair value model. IFRS prefers the fair value method. If the cost method is chosen, the fair value must be disclosed
in the footnotes. Increases or decreases in fair value are recognized on the profit and loss statement since this is
investment property.

**INTANGIBLE ASSETS**
Intangible assets are assets that can not be touched or do not have any physical substance. Similar to the US GAAP,intangible assets must meet one of two following criteria:

a) It is based on contractual or legal rights
b) It can be separated from the entity and sold, transferred, licensed, rented or exchanged.

If the intangible asset is purchased, it is initially recorded at cost, unless it was acquired in a business combination.
In a business combination (See Chapter 4) the intangible assets, including goodwill, are recorded at fair value.

Unlike the US, **internally** generated intangible assets (except goodwill) may be capitalized if they have future
economic benefits and can be measure reliably.

Theoretically, intangible assets may use either the cost or revaluation model. However, to use the revaluation mode,
the intangible assets must be traded in an active market. Any increases or decreases from the revaluation process are
recorded in other comprehensive income.

Intangibles with finite lives are amortized over their useful lives and intangibles with indefinite lives are tested
annually for impairment.

**IMPAIRMENT OF ASSETS**
An asset impairment exist if the carrying value of the asset is greater than the **recoverable amount**. The recoverable
amount is the greater of the asset’s net selling price and its value in use (present value of future cash flows). For
assets carried at cost, the loss on impairment is recognized as an expense of the period. If the asset is carried at fair
value under the revaluation model, the impairment loss may be charged against an upward revaluation until the
revaluation surplus reaches zero. The revaluation surplus can not have a debit balance. Assets should be review at
each reporting date to see if conditions exist that would cause impairment. Intangible assets that have an indefinite
life (like goodwill) must be tested annually.

If the impaired asset recovers its value a reversal of the loss maybe recognized except for goodwill. If the cost model
is used, the reversal of the impairment may be recognized on the income statement, if the revaluation model is used,
on the other comprehensive income statement.

**RESEARCH AND DEVELOPMENT COST**
In general under IFRS R & D costs are expensed. There is one major exception. If during the R & D, a project
becomes **economically viable** as an internally generated intangible asset, the development cost from that point on may
be capitalized. Economically viable means that it is probable that the project will produce future benefits and the
amounts can be reliably measured.

**BIOLOGICAL ASSETS**
Biological assets (agricultural assets) are living animals or plants. Biological assets may be reported at cost or fair
value if the fair value can be measured reliably in an active market.
# Fast Track Summary

## Fixed Assets

<table>
<thead>
<tr>
<th>Property, Plant and Equipment</th>
<th>IFRS</th>
<th>US GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divide into classes of assets</td>
<td>Not Required</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost or Revaluation Models</th>
<th>Acceptable</th>
<th>Revaluation Model is not acceptable</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Apply Cost or Revaluation to each class of PP &amp; E</th>
<th>Acceptable</th>
<th>Not acceptable</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>The Revaluation model to assets</th>
<th>Assets can be reliably measured</th>
<th>NA</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Revaluation Model on PP&amp;E usually requires an appraisal</th>
<th>Yes</th>
<th>NA</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>How often do appraisals have to be done?</th>
<th>Regularly (Not annually)</th>
<th>NA</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>The increase in fair value is reported as</th>
<th>Other comprehensive income</th>
<th>NA</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Depreciation Models</th>
<th>Same</th>
<th>Same</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Non-monetary transaction</th>
<th>Same</th>
<th>Same</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Cost or Fair Value Model for Investment Property</th>
<th>Fair value preferred by IFRS</th>
<th>NA</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>If cost is used for Investment property</th>
<th>Fair value must be disclosed in footnotes</th>
<th>NA</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Increases and decreases fair value</th>
<th>Recognized on the profit and loss statement</th>
<th>NA</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Intangible Assets may be reported at cost</th>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Intangible Assets may be reported at Fair Value</th>
<th>Yes, if traded in active market</th>
<th>No</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Impairment of Assets exist</th>
<th>Carrying amount in excess of recoverable amount. This is the greater of the asset’s net selling price or value in use. (PV of future cash flow)</th>
<th>Carry amount in excess of future undiscounted cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table:</td>
<td>Cash Flows</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Reversal of Prior Impairment</td>
<td>Yes, except for goodwill</td>
<td>No</td>
</tr>
<tr>
<td>R &amp; D Expensed</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>R &amp; D Capitalized</td>
<td>Development cost can be capitalized if the project is economically viable</td>
<td>No</td>
</tr>
</tbody>
</table>
Chapter Eleven  
Other Assets, Liabilities and Disclosures Questions

ACCOUNTS RECEIVABLE  
DOUBTFUL ACCOUNTS

1. Which method of recording uncollectible accounts expense is consistent with accrual accounting? 

<table>
<thead>
<tr>
<th>Allowance</th>
<th>Direct write-off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

2. The following information pertains to Oro Corp.: 

Credit sales for the year ended December 31, 20X5 $450,000  
Credit balance in allowance for uncollectible accounts at January 1, 20X5 $10,800  
Bad debts written off during 20X5 $18,000  

According to past experience, 3% of Oro's credit sales have been uncollectible. After provision is made for bad debt expense for the year ended December 31, 20X5, the allowance for uncollectible accounts balance would be

a. $6,300  
b. $13,500  
c. $24,300  
d. $31,500

3. The following accounts were abstracted from Roxy Co.'s unadjusted trial balance at December 31, 20X6:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Allowance for uncollectible accounts</td>
<td>8,000</td>
</tr>
<tr>
<td>Net credit sales</td>
<td>$3,000,000</td>
</tr>
</tbody>
</table>

Roxy estimates that 3% of the gross accounts receivable will become uncollectible. After adjustment at December 31, 20X6, the allowance for uncollectible accounts should have a credit balance of

   a. $90,000  
b. $82,000  
c. $38,000  
d. $30,000

4. The following information pertains to Tara Co.'s accounts receivable at December 31, 20X9:

<table>
<thead>
<tr>
<th>Days outstanding</th>
<th>Amount</th>
<th>% uncollectible</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 60</td>
<td>$120,000</td>
<td>1%</td>
</tr>
<tr>
<td>61 - 120</td>
<td>90,000</td>
<td>2%</td>
</tr>
<tr>
<td>Over 120</td>
<td>100,000</td>
<td>6%</td>
</tr>
</tbody>
</table>

$310,000

During 20X9, Tara wrote off $7,000 in receivables and recovered $4,000 that had been written off in prior years. Tara’s December 31, 20X8, allowance for uncollectible accounts was $22,000. Under the aging method, what amount of allowance for uncollectible accounts should Tara report at December 31, 20X9?

a. $9,000  
b. $10,000  
c. $13,000  
d. $19,000

5. Inge Co. determined that the net value of its accounts receivable at December 31, 2000, based on an aging of the receivables, was $325,000. Additional information is as follows:

| Allowance for uncollectible accounts - 1/1/00 | $ 30,000 |
| Uncollectible accounts written off during 2000 | 18,000 |
| Uncollectible accounts recovered during 2000 | 2,000 |
| Accounts receivable at 12/31/00 | 350,000 |

For 2000, what would be Inge's uncollectible accounts expense?

a. $ 5,000  
b. $11,000  
c. $15,000  
d. $21,000
6. The following information relates to Jay Co.’s accounts receivable for 20X9:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable, 1/1/X9</td>
<td>$650,000</td>
</tr>
<tr>
<td>Credit sales for 20X9</td>
<td>$2,700,000</td>
</tr>
<tr>
<td>Sales returns for 20X9</td>
<td>$75,000</td>
</tr>
<tr>
<td>Accounts written off during 20X9</td>
<td>$40,000</td>
</tr>
<tr>
<td>Collections from customers during 20X9</td>
<td>$2,150,000</td>
</tr>
<tr>
<td>Estimated future sales returns at 12/31/X9</td>
<td>$50,000</td>
</tr>
</tbody>
</table>

What amount should Jay report for accounts receivable, before allowances for sales returns and uncollectible accounts, at December 31, 20X9?

- a. $1,200,000
- b. $1,125,000
- c. $1,085,000
- d. $925,000

7. Wren Company had the following account balances at December 31, 20X4:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$900,000</td>
</tr>
<tr>
<td>Allowance for doubtful accounts (before any provision for 20X4)</td>
<td>$16,000</td>
</tr>
<tr>
<td>Credit sales for 20X4</td>
<td>$1,750,000</td>
</tr>
</tbody>
</table>

Wren is considering the following methods of estimating doubtful accounts expense for 20X4:
- Based on credit sales at 2%
- Based on accounts receivable at 5%

What amount should Wren charge to doubtful accounts expense under each method?

<table>
<thead>
<tr>
<th>Percentage of credit sales</th>
<th>Percentage of accounts receivable</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $51,000</td>
<td>$45,000</td>
</tr>
<tr>
<td>b. $51,000</td>
<td>$29,000</td>
</tr>
<tr>
<td>c. $35,000</td>
<td>$45,000</td>
</tr>
<tr>
<td>d. $35,000</td>
<td>$29,000</td>
</tr>
</tbody>
</table>

8. A company uses the allowance method to recognize uncollectible accounts expense. What is the effect at the time of the collection of an account previously written off on each of the following accounts?

<table>
<thead>
<tr>
<th>Allowance for uncollectible accounts</th>
<th>Uncollectible accounts expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No effect</td>
<td>Decrease</td>
</tr>
<tr>
<td>b. Increase</td>
<td>Decrease</td>
</tr>
<tr>
<td>c. Increase</td>
<td>No effect</td>
</tr>
<tr>
<td>d. No effect</td>
<td>No effect</td>
</tr>
</tbody>
</table>

9. Gibbs Co. uses the allowance method for recognizing uncollectible accounts. Ignoring deferred taxes, the entry to record the write-off of a specific uncollectible account

- a. Affects neither net income nor working capital.
- b. Affects neither net income nor accounts receivable.
- c. Decreases both net income and accounts receivable.
- d. Decreases both net income and working capital.

10. Which of the following is a method to generate cash from accounts receivable?

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Factoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

11. Gar Co. factored its receivables without recourse with Ross Bank. Gar received cash as a result of this transaction, which is best described as a

- a. Loan from Ross collateralized by Gar's accounts receivable.
- b. Loan from Ross to be repaid by the proceeds from Gar's accounts receivables.
- c. Sale of Gar's accounts receivable to Ross, with the risk of uncollectible accounts retained by Gar.
- d. Sale of Gar's accounts receivable to Ross, with the risk of uncollectible accounts transferred to Ross.
FIXED ASSETS

WHAT IS COST?

12. On December 1, 20X8, Boyd Co. purchased a $400,000 tract of land for a factory site. Boyd razed an old building on the property and sold the materials it salvaged from the demolition. Boyd incurred additional costs and realized salvage proceeds during December 20X8 as follows:

Demolition of old building $50,000
Legal fees for purchase contract and recording ownership 10,000
Title guarantee insurance 12,000
Proceeds from sale of salvaged materials 8,000

In its December 31, 20X8, balance sheet, Boyd should report a balance in the land account of
a. $464,000
b. $460,000
c. $442,000
d. $422,000

13. Merry Co. purchased a machine costing $125,000 for its manufacturing operations and paid shipping costs of $20,000. Merry spent an additional $10,000 testing and preparing the machine for use. What amount should Merry record as the cost of the machine?

a. $155,000.
b. $145,000.
c. $135,000.
d. $125,000.

14. During 20X5, Yvo Corp. installed a production assembly line to manufacture furniture. In 20X6, Yvo purchased a new machine and rearranged the assembly line to install this machine. The rearrangement did not increase the estimated useful life of the assembly line, but it did result in significantly more efficient production. The following expenditures were incurred in connection with this project:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine</td>
<td>$75,000</td>
</tr>
<tr>
<td>Labor to install machine</td>
<td>14,000</td>
</tr>
<tr>
<td>Parts added in rearranging the assembly line to provide future benefits</td>
<td>40,000</td>
</tr>
<tr>
<td>Labor and overhead to rearrange the assembly line</td>
<td>18,000</td>
</tr>
</tbody>
</table>

What amount of the above expenditures should be capitalized in 20X6?

a. $147,000
b. $107,000
c. $89,000
d. $75,000

15. Lano Corp.’s forest land was condemned for use as a national park. Compensation for the condemnation exceeded the forest land’s carrying amount. Lano purchased similar, but larger, replacement forest land for an amount greater than the condemnation award. As a result of the condemnation and replacement, what is the net effect on the carrying amount of forest land reported in Lano’s balance sheet?

a. The amount is increased by the excess of the replacement forest land’s cost over the condemned forest land’s carrying amount.
b. The amount is increased by the excess of the replacement forest land’s cost over the condemnation award.
c. The amount is increased by the excess of the condemnation award over the condemned forest land’s carrying amount.
d. No effect, because the condemned forest land’s carrying amount is used as the replacement forest land’s carrying amount.

DEPRECIATION

16. On January 2, 20X5, Lem Corp. bought machinery under a contract that required a down payment of $10,000, plus 24 monthly payments of $5,000 each, for total cash payments of $130,000. The cash equivalent price of the machinery was $110,000. The machinery has an estimated useful life of ten years and estimated salvage value of $5,000. Lem uses straight-line depreciation. In its 20X5 income statement, what amount should Lem report as depreciation for this machinery?

a. $10,500.
b. $11,000.
c. $12,500.
d. $13,000.

17. Turtle Co. purchased equipment on January 2, 20X4, for $50,000. The equipment had an estimated five-year service life. Turtle's policy for five-year assets is to use the 200% double-declining
depreciation method for the first two years of the asset's life, and then switch to the straight-line depreciation method. In its December 31, 20X6, balance sheet, what amount should Turtle report as accumulated depreciation for equipment?

a. $30,000.
b. $38,000.
c. $39,200.
d. $42,000.

18. Vore Corp. bought equipment on January 2, 20X5, for $200,000. This equipment had an estimated useful life of five years and a salvage value of $20,000. Depreciation was computed by the 150% declining balance method. The accumulated depreciation balance at December 31, 20X6, should be

a. $102,000
b. $98,000
c. $91,800
d. $72,000

19. On April 1, 20X5, Kew Co. purchased new machinery for $300,000. The machinery has an estimated useful life of five years, and depreciation is computed by the sum-of-the-years’-digits method. The accumulated depreciation on this machinery at March 31, 20X7, should be

a. $192,000
b. $180,000
c. $120,000
d. $100,000

20. The graph below depicts three depreciation expense patterns over time.

Which depreciation expense pattern corresponds to the sum-of-the-years’-digits method and which corresponds to the double-declining balance method?

<table>
<thead>
<tr>
<th>Double-declining balance</th>
<th>Sum-of-the-years-digits balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. III</td>
<td>II</td>
</tr>
<tr>
<td>b. II</td>
<td>I</td>
</tr>
<tr>
<td>c. I</td>
<td>III</td>
</tr>
<tr>
<td>d. II</td>
<td>III</td>
</tr>
</tbody>
</table>

21. On January 2, 20X2, Reed Co. purchased a machine for $800,000 and established an annual depreciation charge of $100,000 over an eight-year life. During 20X5, after issuing its 20X4 financial statements, Reed concluded that: (1) the machine suffered permanent impairment of its operational value, and (2) $200,000 is a reasonable estimate of the amount expected to be recovered through use of the machine for the period January 1, 20X5, through December 31, 20X9. In Reed’s December 31, 20X5, balance sheet, the machine should be reported at a carrying amount of

a. $0
b. $100,000
c. $160,000
d. $400,000

22. Depreciation is computed on the original cost less estimated salvage value under which of the following depreciation methods?

<table>
<thead>
<tr>
<th>Double-declining balance</th>
<th>Productive output</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

23. In which of the following situations is the units-of-production method of depreciation most appropriate?

a. An asset's service potential declines with use.
b. An asset's service potential declines with the passage of time.
c. An asset is subject to rapid obsolescence.
d. An asset incurs increasing repairs and maintenance with use.
24. Net income is understated if, in the first year, estimated salvage value is excluded from the depreciation computation when using the

<table>
<thead>
<tr>
<th>Method</th>
<th>Production or use method</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
</tr>
<tr>
<td>d. No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**DISPOSAL OF FIXED ASSETS**

25. On December 31, 20X6, a building owned by Pine Corp. was totally destroyed by fire. The building had fire insurance coverage up to $500,000. Other pertinent information as of December 31, 20X6, follows:

- Building, carrying amount: $520,000
- Building, fair market value: $550,000
- Removal and clean-up costs: $10,000

During January 20X7, before the 20X6 financial statements were issued, Pine received insurance proceeds of $500,000. On what amount should Pine base the determination of its loss on involuntary conversion?

a. $520,000
b. $530,000
c. $550,000
d. $560,000

26. Weir Co. uses straight-line depreciation for its property, plant, and equipment, which, stated at cost, consisted of the following:

<table>
<thead>
<tr>
<th></th>
<th>12/31/X6</th>
<th>12/31/X5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$ 25,000</td>
<td>$ 25,000</td>
</tr>
<tr>
<td>Buildings</td>
<td>195,000</td>
<td>195,000</td>
</tr>
<tr>
<td>Machinery &amp; Equipment</td>
<td>695,000</td>
<td>650,000</td>
</tr>
<tr>
<td></td>
<td>915,000</td>
<td>870,000</td>
</tr>
<tr>
<td>Less accumulated depreciation</td>
<td>$400,000</td>
<td>$370,000</td>
</tr>
<tr>
<td></td>
<td>$515,000</td>
<td>$500,000</td>
</tr>
</tbody>
</table>

Weir's depreciation expense for 20X6 and 20X5 was $55,000 and $50,000, respectively. What amount was debited to accumulated depreciation during 20X6 because of property, plant, and equipment retirements?

a. $40,000.
b. $25,000.
c. $20,000.
d. $10,000.

**COMPOSITE DEPRECIATION**

27. A company using the composite depreciation method for its fleet of trucks, cars, and campers retired one of its trucks and received cash from a salvage company. The net carrying amount of these composite asset accounts would be decreased by the

a. Cash proceeds received and original cost of the truck.
b. Cash proceeds received.
c. Original cost of the truck less the cash proceeds.
d. Original cost of the truck.

**CAPITALIZED INTEREST**

28. Cole Co. began constructing a building for its own use in January 20X4. During 20X4, Cole incurred interest of $50,000 on specific construction debt, and $20,000 on other borrowings. Interest computed on the weighted-average amount of accumulated expenditures for the building during 20X4 was $40,000. What amount of interest cost should Cole capitalize?

a. $20,000.
b. $40,000.
c. $50,000.
d. $70,000.

29. Clay Company started construction of a new office building on January 1, 20X4, and moved into the finished building on July 1, 20X5. Of the building's $2,500,000 total cost, $2,000,000 was incurred in 20X4 evenly throughout the year. Clay's incremental borrowing rate was 12% throughout 20X4, and the total amount of interest incurred by Clay during 20X4 was $102,000. What amount should Clay report as capitalized interest at December 31, 20X4?

a. $102,000
b. $120,000
c. $150,000
d. $240,000
30. During 20X6, Belardo Corporation constructed and manufactured certain assets, and incurred the following interest costs in connection with those activities:

<table>
<thead>
<tr>
<th>Interest costs incurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warehouse constructed for Belardo's own use $20,000</td>
</tr>
<tr>
<td>Special-order machine for sale to unrelated customer, produced according to customer's specifications $9,000</td>
</tr>
<tr>
<td>Inventories routinely manufactured, produced on a repetitive basis $7,000</td>
</tr>
</tbody>
</table>

All of these assets required an extended period of time for completion. Assuming the effect of interest capitalization is material, what is the total amount of interest costs to be capitalized?

a. $0
b. $20,000
c. $29,000
d. $36,000

NON-MONETARY TRANSACTIONS

NON-RECIPROCAL TRANSFERS

31. On June 27, 20X6, Brite Co. distributed to its common stockholders 100,000 outstanding common shares of its investment in Quik, Inc., an unrelated party. The carrying amount on Brite’s books of Quik’s $1 par common stock was $2 per share. Immediately after the distribution, the market price of Quik’s stock was $2.50 per share. In its income statement for the year ended June 30, 20X6, what amount should Brite report as gain before income taxes on disposal of the stock?

a. $250,000
b. $200,000
c. $50,000
d. $0

EXCHANGE WITH COMMERCIAL SUBSTANCE – GAIN

32. In October 20X6 Allen Company exchanged a used packaging machine, having a book value of $120,000, for a dissimilar new machine and paid a cash difference of $15,000. The market value of the used packaging machine was determined to be $140,000.

Assume that the transaction has commercial substance.

In its income statement for the year ended December 31, 20X6, how much gain should Allen recognize on this exchange?

a. $0
b. $5,000
c. $15,000
d. $20,000

33. Caine Motor Sales Exchanged a car from its inventory for a computer to be used as a long-term asset. The following information relates to this exchange that took place on July 31, 20X5:

| Carrying amount of the car | $30,000 |
| Listed selling price of the car | $45,000 |
| Fair value of the computer | $43,000 |
| Cash difference paid by Caine | $5,000 |

Caine states that there will be a significant change in cash flows as a result of this transaction. Therefore the transaction has commercial substance.

On July 31, 20X5, what amount of profit should Caine recognize on this exchange?

a. $0
b. $8,000
c. $10,000
d. $13,000

EXCHANGE WITH COMMERCIAL SUBSTANCE – LOSS

34. On March 31, 20X5, Winn Company traded in an old machine having a carrying amount of $16,800, and paid a cash difference of $6,000 for a new machine having a total cash price of $20,500.

Winn states that because of the difference in age of the assets, there should be a significant difference in cash flow. Therefore, the transaction has commercial substance.

On March 31, 20X5, what amount of loss should Winn recognize on this exchange?

a. $0
b. $2,300
c. $3,700
d. $6,000
35. On December 30, 20X5, Diamond Company traded in an old machine with a book value of $10,000 for a similar new machine having a list price of $32,000, and paid a cash difference of $19,000. Diamond does not think there will be a significant change in cash flows as a result of this transaction. Therefore, the transaction lacks commercial substance. Diamond should record the new machine at:
   a. $32,000
   b. $29,000
   c. $22,000
   d. $19,000

36. Pine Football Company had a player contract with Duff that is recorded in its books at $500,000 on July 1, 20X5. Ace Football Company had a player contract with Terry that is recorded in its books at $600,000 on July 1, 20X5. On this date, Pine traded Duff to Ace for Terry and paid a cash difference of $50,000. The fair value of the Terry contract was $700,000 on the exchange date. Pine stated that this transaction lacked commercial substance. The Terry contract should be recorded in Pine’s books at:
   a. $550,000
   b. $600,000
   c. $650,000
   d. $700,000

37. Good Deal Company received $20,000 in cash and a used computer with a fair value of $180,000 from Harvest Corporation for Good Deal’s existing computer having a fair value of $200,000 and an undepreciated cost of $160,000 recorded on its books. Good Deal does not think that there will be significant change in cash flows. Therefore, the transaction lacks commercial substance. How much gain should Good Deal recognize on this exchange, and at what amount should the acquired computer be recorded, respectively?
   a. Zero and $140,000.
   b. $4,000 and $144,000.
   c. $20,000 and $160,000.
   d. $40,000 and $180,000.

38. ASC 360 – Accounting for Nonmonetary Transactions states that if the transaction causes a significant change in cash flows, the transaction has commercial substance. In transactions of this type, at what amount should the entity record the asset received?
   a. Book Value
   b. Intrinsic Value
   c. Book Value plus Boot
   d. Fair Value

39. May Co. and Sty co. exchanged nonmonetary assets and May paid cash to Sty in the transaction. May stated that the exchange had commercial substance. However, the assets exchanged were so specialized that there was not an objective basis to determine a fair value. In cases like this, the FASB suggest that May record the asset at:
   a. Estimated Fair Value
   b. Book Value
   c. Book Value of asset traded plus cash paid
   d. Intrinsic Value

INTANGIBLE ASSETS

40. Which of the following costs of goodwill should be capitalized?

<table>
<thead>
<tr>
<th>Maintaining goodwill</th>
<th>Developing goodwill</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>No</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

41. Hy Corp. bought Patent A for $40,000 and Patent B for $60,000. Hy also paid acquisition costs of $5,000 for Patent A and $7,000 for Patent B. Both patents were challenged in legal actions. Hy paid $20,000 in legal fees for a successful defense of Patent A and $30,000 in legal fees for an unsuccessful defense of Patent B. What amount should Hy capitalized for patents?
   a. $162,000
   b. $112,000
   c. $65,000
   d. $45,000
42. During 20X5, Jase Co. incurred research and development costs of $136,000 in its laboratories relating to a patent that was granted on July 1, 20X5. Costs of registering the patent equaled $34,000. The patent's legal life is 17 years, and its estimated economic life is 10 years. In its December 31, 20X5, balance sheet, what amount should Jase report as patent, net of accumulated amortization?
   a. $32,300
   b. $33,000
   c. $161,500
   d. $165,000

43. On January 2, 20X5, Judd Co. bought a trademark from Krug Co. for $500,000. Judd retained an independent consultant, who estimated the trademark's remaining life to be 50 years. Its unamortized cost on Krug's accounting records was $380,000. Judd decided to amortize the trademark over the maximum period allowed. In Judd's December 31, 20X5, balance sheet, what amount should be reported as accumulated amortization?
   a. $7,600.
   b. $9,500.
   c. $10,000.
   d. $12,500.

44. On January 2, 20X5, Rafa Co. purchased a franchise with a useful life of ten years for $50,000. An additional franchise fee of 3% of franchise operation revenues must be paid each year to the franchisor. Revenues from franchise operations amounted to $400,000 during 20X5. In its December 31, 20X5, balance sheet, what amount should Rafa report as an intangible asset-franchise?
   a. $33,000.
   b. $43,800.
   c. $45,000.
   d. $50,000.

**ORGANIZATION COST**

45. On January 1, 20X5, Kew Corp. incurred organization costs of $24,000. For tax purposes, Kew is amortizing these costs over the maximum period allowed by the IRS. For financial reporting purposes, Kew is following GAAP. What portion of organization cost would Kew defer to years subsequent to 20X5?
   a. $22,400
   b. $19,200
   c. $4,800
   d. $0

**COMPUTER SOFTWARE**

46. On December 31, 20X7, Bit Co. had capitalized costs for a new computer software product with an economic life of five years. Sales for 20X8 were 30 percent of expected total sales of the software. At December 31, 20X8, the software had a net realizable value equal to 90 percent of the capitalized cost. What percentage of the original capitalized cost should be reported as the net amount on Bit's December 31, 20X8, balance sheet?
   a. 70%
   b. 72%
   c. 80%
   d. 90%

**LEASEHOLD IMPROVEMENTS**

47. On January 1, 20X5, Nobb Corp. signed a 12-year lease for warehouse space. Nobb has an option to renew the lease for an additional 8-year period on or before January 1, 20X9. During January 20X7, Nobb made substantial improvements to the warehouse. The cost of these improvements was $540,000, with an estimated useful life of 15 years. At December 31, 20X7, Nobb intended to exercise the renewal option. Nobb has taken a full year's amortization on this leasehold. In Nobb's December 31, 20X7, balance sheet, the carrying amount of this leasehold improvement should be
   a. $486,000
   b. $504,000
   c. $510,000
   d. $513,000

**RESEARCH AND DEVELOPMENT**

48. Which of the following costs is included in research and development expense?
   a. Ongoing efforts to improve existing products.
   b. Troubleshooting in connection with breakdowns during commercial production.
   c. Periodic design changes to existing products.
   d. Design, construction and testing of preproduction prototypes and models.
49. Cody Corp. incurred the following costs during 20X6:

- Design of tools, jigs, molds and dies involving new technology: $125,000
- Modification of the formulation of a process: $160,000
- Trouble-shooting in connection with breakdowns during commercial production: $100,000
- Adaptation of an existing capability to a particular customer's need as part of a continuing commercial activity: $110,000

In its 20X6 income statement, Cody should report research and development expense of:

a. $125,000  
b. $160,000  
c. $235,000  
d. $285,000

50. West, Inc., made the following expenditures relating to Product Y:

- Legal costs to file a patent on Product Y—$10,000. Production of the finished product would not have been undertaken without the patent.
- Special equipment to be used solely for development of Product Y—$60,000. The equipment has no other use and has an estimated useful life of four years.
- Labor and material costs incurred in producing a prototype model—$200,000.
- Cost of testing the prototype—$80,000.

What is the total amount of costs that will be expensed when incurred?

a. $280,000  
b. $295,000  
c. $340,000  
d. $350,000

51. Ogden Corp. lends a supplier cash which is to be repaid five years hence with no stated interest. At the same time a purchase contract is entered into for the supplier's products. Ogden will be required to recognize interest revenue in connection with the loan a. Under no circumstances.  
b. If the contract price is equal to the prevailing market rate.  
c. If the contract price is less than the prevailing market rate.  
d. If the contract price is more than the prevailing market rate.

52. On December 30, 20X6, Bart, Inc., purchased a machine from Fell Corp. in exchange for a noninterest bearing note requiring eight payments of $20,000. The first payment was made on December 30, 20X6, and the others are due annually on December 30. At the date of issuance, the prevailing rate of interest for this type of note was 11%. Present value factors are as follows:

<table>
<thead>
<tr>
<th>Period</th>
<th>Present value of ordinary annuity of 1 at 11%</th>
<th>Present value of annuity in advance of 1 at 11%</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>4.712</td>
<td>5.231</td>
</tr>
<tr>
<td>8</td>
<td>5.146</td>
<td>5.712</td>
</tr>
</tbody>
</table>

On Bart's December 31, 20X6, balance sheet, the note payable to Fell was:

a. $94,240  
b. $102,920  
c. $104,620  
d. $114,240

53. On January 1, 20X5, Ott Company sold goods to Fox Company. Fox signed a noninterest-bearing note requiring payment of $60,000 annually for seven years. The first payment was made on January 1, 20X5. The prevailing rate of interest for this type of note at date of issuance was 10%. Information on present value factors is as follows:

<table>
<thead>
<tr>
<th>Periods</th>
<th>Present value of ordinary annuity of 1 at 10%</th>
<th>Present value of annuity of 1 at 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>.56</td>
<td>4.36</td>
</tr>
<tr>
<td>7</td>
<td>.51</td>
<td>4.87</td>
</tr>
</tbody>
</table>

Ott should record the sales revenue in January 20X5 of:

a. $321,600  
b. $292,200  
c. $261,600  
d. $214,200
Items 54 and 55 are based on the following:

On January 2, 20X3, Emme Co. sold equipment with a carrying amount of $480,000 in exchange for a $600,000 noninterest bearing note due January 2, 20X6. There was no established exchange price for the equipment. The prevailing rate of interest for a note of this type at January 2, 20X3, was 10%. The present value of 1 at 10% for three periods is 0.75.

54. In Emme's 20X3 income statement, what amount should be reported as interest income?
   a. $9,000.
   b. $45,000.
   c. $50,000.
   d. $60,000.

55. In Emme's 20X3 income statement, what amount should be reported as gain (loss) on sale of machinery?
   a. ($30,000) loss.
   b. $30,000 gain.
   c. $120,000 gain.
   d. $270,000 gain.

56. On December 31, 20X6, Jet Co. received two $10,000 notes receivable from customers in exchange for services rendered. On both notes, interest is calculated on the outstanding principal balance at the annual rate of 3% and payable at maturity. The note from Hart Corp., made under customary trade terms, is due in nine months and the note from Maxx, Inc., is due in five years. The market interest rate for similar notes on December 31, 20X6, was 8%. The compound interest factors to convert future values into present values at 8% follow:

<table>
<thead>
<tr>
<th>Future Value</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1 due in nine months</td>
<td>.944</td>
</tr>
<tr>
<td>$1 due in five years</td>
<td>.680</td>
</tr>
</tbody>
</table>

At what amounts should these two notes receivable be reported in Jet's December 31, 20X6, balance sheet?

<table>
<thead>
<tr>
<th>Hart</th>
<th>Maxx</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $9,440</td>
<td>$6,800</td>
</tr>
<tr>
<td>b. $9,652</td>
<td>$7,820</td>
</tr>
<tr>
<td>c. $10,000</td>
<td>$6,800</td>
</tr>
<tr>
<td>d. $10,000</td>
<td>$7,820</td>
</tr>
</tbody>
</table>

57. After being held for 40 days, a 120-day 12% interest-bearing note receivable was discounted at a bank at 15%. The proceeds received from the bank equal
   a. Maturity value less the discount at 12%.
   b. Maturity value less the discount at 15%.
   c. Face value less the discount at 12%.
   d. Face value less the discount at 15%.

58. Roth, Inc. received from a customer a one-year, $500,000 note bearing annual interest of 8%. After holding the note for six months, Roth discounted the note at Regional Bank at an effective interest rate of 10%. What amount of cash did Roth receive from the bank?
   a. $540,000.
   b. $523,810.
   c. $513,000.
   d. $495,238.

59. Frame Co. has an 8% note receivable dated June 30, 20X4, in the original amount of $150,000. Payments of $50,000 in principal plus accrued interest are due annually on July 1, 20X5, 20X6, and 20X7. In its June 30, 20X6, balance sheet, what amount should Frame report as a current asset for interest on the note receivable?
   a. $0.
   b. $4,000.
   c. $8,000.
   d. $12,000.

60. On August 15, 20X6, Benet Co. sold goods for which it received a note bearing the market rate of interest on that date. The four-month note was dated July 15, 20X6. Note principal, together with all interest, is due November 15, 20X6. When the note was recorded on August 15, which of the following accounts increased?
   a. Unearned discount.
   b. Interest receivable.
   c. Prepaid interest.
   d. Interest revenue.
61. On June 1, 20X6, Yola Corp. loaned Dale $500,000 on a 12% note, payable in five annual installments of $100,000 beginning January 2, 20X7. In connection with this loan, Dale was required to deposit $5,000 in a noninterest-bearing escrow account. The amount held in escrow is to be returned to Dale after all principal and interest payments have been made. Interest on the note is payable on the first day of each month beginning July 1, 20X6. Dale made timely payments through November 1, 20X6. On January 2, 20X7, Yola received payment of the first principal installment plus all interest due. At December 31, 20X6, Yola's interest receivable on the loan to Dale should be
a. $0  
b. $5,000  
c. $10,000  
d. $15,000

62. Leaf Co. purchased from Oak Co. a $20,000, 8%, 5-year note that required five equal annual year-end payments of $5,009. The note was discounted to yield a 9% rate to Leaf. At the date of purchase, Leaf recorded the note at its present value of $19,485. What should be the total interest revenue earned by Leaf over the life of this note?
   a. $5,045  
b. $5,560  
c. $8,000  
d. $9,000

64. North Corp. has an employee benefit plan for compensated absences that gives employees 10 paid vacation days and 10 paid sick days. Both vacation and sick days can be carried over indefinitely. Employees can elect to receive payment in lieu of vacation days; however, no payment is given for sick days not taken. At December 31, 20X5, North’s unadjusted balance of liability for compensated absences was $21,000. North estimated that there were 150 vacation days and 75 sick days available at December 31, 20X5. North’s employees earn an average of $100 per day. In its December 31, 20X5, balance sheet, what amount of liability for compensated absences is North required to report?
   a. $36,000  
b. $22,500  
c. $21,000  
d. $15,000

65. Bloy Corp.’s payroll for the pay period ended October 31, 20X6, is summarized as follows:

<table>
<thead>
<tr>
<th>Department</th>
<th>Total wages</th>
<th>Federal income tax withheld</th>
<th>F.I.C.A. tax</th>
<th>Unemployment tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory</td>
<td>$60,000</td>
<td>$7,000</td>
<td>$56,000</td>
<td>$18,000</td>
</tr>
<tr>
<td>Sales</td>
<td>22,000</td>
<td>3,000</td>
<td>16,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Office</td>
<td>18,000</td>
<td>2,000</td>
<td>8,000</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$100,000</strong></td>
<td><strong>$12,000</strong></td>
<td><strong>$80,000</strong></td>
<td><strong>$20,000</strong></td>
</tr>
</tbody>
</table>

Assume the following payroll tax rates:
- F.I.C.A. for employer and employee: 7% each
- Unemployment: 3%

What amount should Bloy accrue as its share of payroll taxes in its October 31, 20X6, balance sheet?
   a. $18,200  
b. $12,600  
c. $11,800  
d. $6,200

66. In 20X0, Chain, Inc. purchased a $1,000,000 life insurance policy on its president, of which Chain is the beneficiary. Information regarding the policy for the year ended December 31, 20X5, follows:
Cash surrender value, 1/1/X5 $ 87,000  
Cash surrender value, 12/31/X5 108,000  
Annual advance premium paid 1/1/X5 40,000  

During 20X5, dividends of $6,000 were applied to increase the cash surrender value of the policy. What amount should Chain report as life insurance expense for 20X5?  

a. $40,000  
b. $25,000  
c. $19,000  
d. $13,000  

**RELATED PARTY TRANSACTIONS**  

67. Dean Co. acquired 100% of Morey Corp. prior to 20X6. During 20X6, the individual companies included in their financial statements the following:  

<table>
<thead>
<tr>
<th>Dean</th>
<th>Morey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officers' salaries</td>
<td>$75,000</td>
</tr>
<tr>
<td>Officers' expenses</td>
<td>20,000</td>
</tr>
<tr>
<td>Loans to officers</td>
<td>125,000</td>
</tr>
<tr>
<td>Intercompany sales</td>
<td>150,000</td>
</tr>
</tbody>
</table>

What amount should be reported as related party disclosures in the notes to Dean's 20X6 consolidated financial statements?  

a. $150,000  
b. $155,000  
c. $175,000  
d. $330,000  

**CLASSIFICATION OF ASSETS**  

68. The following is Gold Corp.'s June 30, 20X5, trial balance:  

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$10,000</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>$35,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>58,000</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>12,000</td>
</tr>
<tr>
<td>Land held for resale</td>
<td>100,000</td>
</tr>
<tr>
<td>Property, plant, and equipment, net</td>
<td>95,000</td>
</tr>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>32,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>25,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>150,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>83,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$300,000</td>
</tr>
</tbody>
</table>

**Additional Information:**  

- Checks amounting to $30,000 were written to vendors and recorded on June 29, 20X5, resulting in a cash overdraft of $10,000. The checks were mailed on July 9, 20X5.  
- Land held for resale was sold for cash on July 15, 20X5.  
- Gold issued its financial statements on July 31, 20X5.  

In its June 30, 20X5, balance sheet, what amount should Gold report as current assets?  

a. $225,000  
b. $205,000  
c. $195,000  
d. $125,000  

**REVIEW QUESTIONS**  

*Items 69 and 70 are based on the following:*  

The following trial balance of Trey Co. at December 31, 20X5, has been adjusted except for income tax expense:  

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$550,000</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>1,650,000</td>
</tr>
<tr>
<td>Prepaid taxes</td>
<td>300,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$120,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>500,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>680,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>630,000</td>
</tr>
<tr>
<td>Foreign currency translation adjustment</td>
<td>430,000</td>
</tr>
<tr>
<td>Revenues</td>
<td>3,600,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>2,600,000</td>
</tr>
</tbody>
</table>

**Dr.**  

**Cr.**  

$5,530,000  

**Additional Information:**  

- During 20X5, estimated tax payments of $300,000 were charged to prepaid taxes. Trey has not yet recorded income tax expense. There were no differences between financial statement and income tax income, and Trey's tax rate is 30%.  
- Included in accounts receivable is $500,000 due from a customer. Special terms granted to this customer require payment in equal semi-annual installments of $125,000 every April 1 and October 1.
69. In Trey's December 31, 20X5, balance sheet, what amount should be reported as total current assets?
   a. $1,950,000
   b. $2,200,000
   c. $2,250,000
   d. $2,500,000

70. In Trey's December 31, 20X5, balance sheet, what amount should be reported as total retained earnings?
   a. $1,029,000
   b. $1,200,000
   c. $1,330,000
   d. $1,630,000

71. An increase in the cash surrender value of a life insurance policy owned by a company would be recorded by
   a. Decreasing annual insurance expense.
   b. Increasing investment income.
   c. Recording a memorandum entry only.
   d. Decreasing a deferred charge.

72. On November 1, 20X4, Davis Co. discounted with recourse at 10% a one-year, noninterest bearing, $20,500 note receivable maturing on January 31, 20X5. What amount of contingent liability for this note must Davis disclose in its financial statements for the year ended December 31, 20X4?
   a. $0.
   b. $20,000.
   c. $20,333.
   d. $20,500.

73. Gei Co. determined that, due to obsolescence, equipment with an original cost of $900,000 and accumulated depreciation at January 1, 20X5, of $420,000 had suffered permanent impairment, and as a result should have a carrying value of only $300,000 as of the beginning of the year. In addition, the remaining useful life of the equipment was reduced from 8 years to 3. In its December 31, 20X5, balance sheet, what amount should Gei report as accumulated depreciation?
   a. $100,000.
   b. $520,000.
   c. $600,000.
   d. $700,000.

74. On December 30, 20X4, Chang Co. sold a machine to Door Co. in exchange for a noninterest-bearing note requiring ten annual payments of $10,000. Door made the first payment on December 30, 20X4. The market interest rate for similar notes at date of issuance was 8%. Information on present value factors is as follows:

<table>
<thead>
<tr>
<th>Period</th>
<th>Present value of $1 at 8%</th>
<th>Present value of $1 at 8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.50</td>
<td>6.25</td>
</tr>
<tr>
<td>10</td>
<td>0.46</td>
<td>6.71</td>
</tr>
</tbody>
</table>

In its December 31, 20X4, balance sheet, what amount should Chang report as note receivable?
   a. $45,000
   b. $46,000
   c. $62,500
   d. $67,100

75. At January 1, 20X4, Jamin Co. had a credit balance of $260,000 in its allowance for uncollectible accounts. Based on past experience, 2% of Jamin's credit sales have been uncollectible. During 20X4, Jamin wrote off $325,000 of uncollectible accounts. Credit sales for 20X4 were $9,000,000. In its December 31, 20X4, balance sheet, what amount should Jamin report as allowance for uncollectible accounts?
   a. $115,000
   b. $180,000
   c. $245,000
   d. $440,000

76. Theoretically, which of the following costs incurred in connection with a machine purchased for use in a company's manufacturing operations would be capitalized?

<table>
<thead>
<tr>
<th>Insurance on machine while in transit</th>
<th>Testing and preparation of machine for use</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>
77. During 20X6, Burr Co. had the following transactions pertaining to its new office building:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price of land</td>
<td>$60,000</td>
</tr>
<tr>
<td>Legal fees for contracts to purchase land</td>
<td>2,000</td>
</tr>
<tr>
<td>Architects' fees</td>
<td>8,000</td>
</tr>
<tr>
<td>Demolition of old building on site</td>
<td>5,000</td>
</tr>
<tr>
<td>Sale of scrap from old building</td>
<td>3,000</td>
</tr>
<tr>
<td>Construction cost of new building (fully completed)</td>
<td>350,000</td>
</tr>
</tbody>
</table>

In Burr's December 31, 20X6, balance sheet, what amounts should be reported as the cost of land and cost of building?

<table>
<thead>
<tr>
<th>Land</th>
<th>Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $60,000</td>
<td>$360,000</td>
</tr>
<tr>
<td>b. $62,000</td>
<td>$360,000</td>
</tr>
<tr>
<td>c. $64,000</td>
<td>$358,000</td>
</tr>
<tr>
<td>d. $65,000</td>
<td>$362,000</td>
</tr>
</tbody>
</table>

78. The following information pertains to Eagle Co.'s 20X5 sales:

<table>
<thead>
<tr>
<th>Cash sales</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
<td>$80,000</td>
</tr>
<tr>
<td>Returns and allowances</td>
<td>4,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit sales</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
<td>120,000</td>
</tr>
<tr>
<td>Discounts</td>
<td>6,000</td>
</tr>
</tbody>
</table>

On January 1, 20X5, customers owed Eagle $40,000. On December 31, 20X5, customers owed Eagle $30,000. Eagle uses the direct writeoff method for bad debts. No bad debts were recorded in 20X5. Under the cash basis of accounting, what amount of net revenue should Eagle report for 20X5?

a. $76,000  
b. $170,000  
c. $190,000  
d. $200,000

79. Rye Co. purchased a machine with a four-year estimated useful life and an estimated 10% salvage value for $80,000 on January 1, 20X4. In its income statement, what would Rye report as the depreciation expense for 20X6 using the double-declining-balance method?

a. $9,000  
b. $10,000  
c. $18,000  
d. $20,000

80. On March 1, 20X4, Fine Co. borrowed $10,000 and signed a two-year note bearing interest at 12% per annum compounded annually. Interest is payable in full at maturity on February 28, 20X6. What amount should Fine report as a liability for accrued interest at December 31, 20X5?

a. $0  
b. $1,000  
c. $1,200  
d. $2,320

81. Gray Co. was granted a patent on January 2, 20X3, and appropriately capitalized $45,000 of related costs. Gray was amortizing the patent over its estimated useful life of fifteen years. During 20X6, Gray paid $15,000 in legal costs in successfully defending an attempted infringement of the patent. After the legal action was completed, Gray sold the patent to the plaintiff for $75,000. Gray's policy is to take no amortization in the year of disposal. In its 20X6 income statement, what amount should Gray report as gain from sale of patent?

a. $15,000  
b. $24,000  
c. $27,000  
d. $39,000

82. On January 1, 20X2, Crater, Inc. purchased equipment having an estimated salvage value equal to 20% of its original cost at the end of a 10-year life. The equipment was sold December 31, 20X6, for 50% of its original cost. If the equipment's disposition resulted in a reported loss, which of the following depreciation methods did Crater use?

b. Sum-of-the-years'-digits.  
c. Straight-line.  
d. Composite.

83. On January 1, 20X4, Elia Company sold a building, which had a carrying amount of $350,000, receiving a $125,000 down payment and, as additional consideration, a $400,000 noninterest bearing note due on January 1, 20X7. There was no established exchange price for the building, and the note had no ready market. The prevailing rate of interest for a note of this type at January 1, 20X4, was 10%. The present value of 1 at 10% for three periods is 0.75. What amount of interest income should be included in Elia's 20X4 income statement?
84. On Merf’s April 30, 20X3, balance sheet a note receivable was reported as a noncurrent asset and its accrued interest for eight months was reported as a current asset. Which of the following terms would fit Merf’s note receivable?
   a. Both principal and interest amounts are payable on August 31, 20X3, and August 31, 20X4.
   b. Principal and interest are due December 31, 20X3.
   c. Both principal and interest amounts are payable on December 31, 20X3, and December 31, 20X4.
   d. Principal is due August 31, 20X4, and interest is due August 31, 20X3, and August 31, 20X4.

85. On October 1, 20X5, Shaw Corp. purchased a machine for $126,000 that was placed in service on November 30, 20X5. Shaw incurred additional costs for this machine, as follows:
   Shipping $3,000
   Installation 4,000
   Testing 5,000

In Shaw’s December 31, 20X5, balance sheet, the machine's cost should be reported as
   a. $126,000
   b. $129,000
   c. $133,000
   d. $138,000

86. Brill Co. made the following expenditures during 20X5:

Costs to develop computer software for internal use in Brill's general management information system $100,000
Costs of market research activities 75,000

What amount of these expenditures should Brill report in its 20X5 income statement as research and development expenses?
   a. $175,000.
   b. $100,000.
   c. $75,000.
   d. $0.

87. On January 2, 20X2, Lava, Inc. purchased a patent for a new consumer product for $90,000. At the time of purchase, the patent was valid for 15 years; however, the patent's useful life was estimated to be only 10 years due to the competitive nature of the product. On December 31, 20X5, the product was permanently withdrawn from sale under governmental order because of a potential health hazard in the product. What amount should Lava charge against income during 20X5, assuming amortization is recorded at the end of each year?
   a. $ 9,000.
   b. $54,000.
   c. $63,000.
   d. $72,000.

88. Ace Co. sold to King Co. a $20,000, 8%, 5-year note that required five equal annual year-end payments. This note was discounted to yield a 9% rate to King. The present value factors of an ordinary annuity of $1 for five periods are as follows:

<table>
<thead>
<tr>
<th>Rate</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>8%</td>
<td>3.992</td>
</tr>
<tr>
<td>9%</td>
<td>3.890</td>
</tr>
</tbody>
</table>

What should be the total interest revenue earned by King on this note?
   a. $9,000
   b. $8,000
   c. $5,560
   d. $5,050

89. Gavin Co. grants all employees two weeks of paid vacation for each full year of employment. Unused vacation time can be accumulated and carried forward to succeeding years and will be paid at the salaries in effect when vacations are taken or when employment is terminated. There was no employee turnover in 20X6. Additional information relating to the year ended December 31, 20X6, is as follows:

Liability for accumulated vacations at 12/31/X5 $35,000
Pre-20X6 accrued vacations taken from 1/1/X6 to 9/30/X6 (the authorized period for vacations) 20,000
Vacations earned for work in 20X6 (adjusted to current rates) 30,000

Gavin granted a 10% salary increase to all employees on October 1, 20X6, its annual salary increase date. For the year ended December 31, 20X6, Gavin should report vacation pay expense of
90. Malden, Inc. has two patents that have allegedly been infringed by competitors. After investigation, legal counsel informed Malden that it had a weak case on patent A34 and a strong case in regard to patent B19. Malden incurred additional legal fees to stop infringement on B19. Both patents have a remaining legal life of 8 years. How should Malden account for these legal costs incurred relating to the two patents?

- a. Expense costs for A34 and capitalize costs for B19.
- b. Expense costs for both A34 and B19.
- c. Capitalize costs for both A34 and B19.
- d. Capitalize costs for A34 and expense costs for B19.

91. During 20X5, Orr Co. incurred the following costs:

- Research and development services performed by Key Corp. for Orr: $150,000
- Design, construction, and testing of preproduction prototypes and models: $200,000
- Testing in search for new products or process alternatives: $175,000

In its 20X5 income statement, what should Orr report as research and development expense?

- a. $150,000
- b. $200,000
- c. $350,000
- d. $525,000

92. During 20X5, Lyle Co. incurred $400,000 of research and development costs in its laboratory to develop a product for which a patent was granted on July 1, 20X5. Legal fees and other costs associated with the patent totaled $82,000. The estimated economic life of the patent is 10 years. What amount should Lyle capitalize for the patent on July 1, 20X5?

- a. $0
- b. $82,000
- c. $400,000
- d. $482,000

93. Tobin Corp. incurred $160,000 of research and development costs to develop a product for which a patent was granted on January 2, 20X0. Legal fees and other costs associated with registration of the patent totaled $30,000. On March 31, 20X5, Tobin paid $45,000 for legal fees in a successful defense of the patent. The total amount capitalized for this patent through March 31, 20X5, should be

- a. $75,000
- b. $190,000
- c. $205,000
- d. $235,000

94. Amble, Inc. exchanged a truck with a carrying amount of $12,000 and a fair value of $20,000 for a truck and $5,000 cash. The fair value of the truck received was $15,000.

Amble does not think there will be a significant change in cash flows as a result of this transaction. Therefore, the transaction lacks commercial substance. At what amount should Amble record the truck received in the exchange?

- a. $7,000
- b. $9,000
- c. $12,000
- d. $15,000

95. During 20X5, Beam Co. paid $1,000 cash and traded inventory, which had a carrying amount of $20,000 and a fair value of $21,000, for other inventory in the same line of business with a fair value of $22,000.

The reason for this trade was to trade colors and sizes so there should not be a significant change in cash flows. Therefore, the transaction lacks commercial substance. What amount of gain (loss) should Beam record related to the inventory exchange?

- a. $2,000
- b. $1,000
- c. $0
- d. ($1,000)

96. A fixed asset with a five-year estimated useful life and no residual value is sold at the end of the second year of its useful life. How would using the sum-of-the-years'-digits method of depreciation instead of the double declining balance method of
depreciation affect a gain or loss on the sale of the fixed asset?

<table>
<thead>
<tr>
<th>Gain</th>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Decrease</td>
<td>Decrease</td>
</tr>
<tr>
<td>b. Decrease</td>
<td>Increase</td>
</tr>
<tr>
<td>c. Increase</td>
<td>Decrease</td>
</tr>
<tr>
<td>d. Increase</td>
<td>Increase</td>
</tr>
</tbody>
</table>

97. Scott Co. exchanged similar nonmonetary assets with Dale Co. No cash was exchanged. The carrying amount of the asset surrendered by Scott exceeded both the fair value of the asset received and Dale's carrying amount of the asset. The exchange lacks commercial substance, Scott should recognize the difference between the carrying amount of the asset it surrendered and

a. The fair value of the asset it received as a loss.
b. The fair value of the asset it received as a gain.
c. Dale's carrying amount of the asset it received as a loss.
d. Dale's carrying amount of the asset it received as a gain.

98. The following information pertains to Rik Co.'s two employees:

<table>
<thead>
<tr>
<th>Name</th>
<th>Weekly salary</th>
<th>Number of weeks worked in 20X6</th>
<th>Vacation rights vest or accumulate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ryan</td>
<td>$800</td>
<td>52</td>
<td>Yes</td>
</tr>
<tr>
<td>Todd</td>
<td>600</td>
<td>52</td>
<td>No</td>
</tr>
</tbody>
</table>

Neither Ryan nor Todd took the usual two-week vacation in 20X6. In Rik’s December 31, 20X6, financial statements, what amount of vacation expense and liability should be reported?

a. $2,800
b. $1,600
c. $1,400
d. $0

99. Fay Corp. pays its outside salespersons fixed monthly salaries and commissions on net sales. Sales commissions are computed and paid on a monthly basis (in the month following the month of sale), and the fixed salaries are treated as advances against commissions. However, if the fixed salaries for salespersons exceed their sales commissions earned for a month, such excess is not charged back to them. Pertinent data for the month of March 20X5 for the three salespersons are as follows:

<table>
<thead>
<tr>
<th>Salesperson</th>
<th>Fixed salary</th>
<th>Net sales</th>
<th>Commission rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$10,000</td>
<td>$200,000</td>
<td>4%</td>
</tr>
<tr>
<td>B</td>
<td>14,000</td>
<td>400,000</td>
<td>6%</td>
</tr>
<tr>
<td>C</td>
<td>18,000</td>
<td>600,000</td>
<td>6%</td>
</tr>
<tr>
<td>Totals</td>
<td>$42,000</td>
<td>$1,200,000</td>
<td></td>
</tr>
</tbody>
</table>

What amount should Fay accrue for sales commissions payable at March 31, 20X5?

a. $70,000
b. $68,000
c. $28,000
d. $26,000

100. Of the following items, the one which should be classified as a current asset is

a. Trade installment receivables normally collectible in 18 months.
b. Cash designated for the redemption of callable preferred stock.
c. Cash surrender value of a life insurance policy of which the company is beneficiary.
d. A deposit on machinery ordered, delivery of which will be made within six months.

101. On the December 31, 20X6, balance sheet of Mann Co., the current receivables consisted of the following:

| Trade accounts receivable | $93,000 |
| Allowance for uncollectible accounts | (2,000) |
| Claim against shipper for goods lost in transit (November 20X6) | 3,000 |
| Selling price of unsold goods sent by Mann on consignment at 130% of cost (not included in Mann's ending inventory) | 26,000 |
| Security deposit on lease of warehouse used for storing some inventories | 30,000 |
| Total | $150,000 |

At December 31, 20X6, the correct total of Mann's current net receivables was

a. $94,000
b. $120,000
c. $124,000
d. $150,000
102. When the allowance method of recognizing uncollectible accounts is used, the entries at the time of collection of a small account previously written off would
a. Increase the allowance for uncollectible accounts.

b. Increase net income.

c. Decrease the allowance for uncollectible accounts.

d. Have no effect on the allowance for uncollectible accounts.

103. Delta, Inc. sells to wholesalers on terms of 2/15, net 30. Delta has no cash sales but 50% of Delta's customers take advantage of the discount. Delta uses the gross method of recording sales and trade receivables. An analysis of Delta's trade receivables balances at December 31, 20X5, revealed the following:

<table>
<thead>
<tr>
<th>Age</th>
<th>Amount</th>
<th>Collectible</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 15 days</td>
<td>100,000</td>
<td>100%</td>
</tr>
<tr>
<td>16 - 30 days</td>
<td>60,000</td>
<td>95%</td>
</tr>
<tr>
<td>31 - 60 days</td>
<td>5,000</td>
<td>90%</td>
</tr>
<tr>
<td>Over 60 days</td>
<td>2,500</td>
<td>$50</td>
</tr>
<tr>
<td></td>
<td>$167,500</td>
<td></td>
</tr>
</tbody>
</table>

In its December 31, 20X5, balance sheet, what amount should Delta report for allowance for discounts?

a. $1,000.

b. $1,260.

c. $1,675.

d. $2,000.

104. On July 1, 20X6, Balt Co. exchanged a truck for 25 shares of Ace Corp.'s common stock. On that date, the truck's carrying amount was $2,500, and its fair value was $3,000. Also, the book value of Ace's stock was $60 per share. On December 31, 20X6, Ace had 250 shares of common stock outstanding and its book value per share was $50.

Balt thinks that the transaction will significantly change the cash flows. Therefore, the transaction has commercial substance.

What amount should Balt report in its December 31, 20X6, balance sheet as investment in Ace?

a. $3,000

b. $2,500

c. $1,500

d. $1,250

105. On January 2, 2002, Gant Co. purchased a franchise with a useful life of five years for $60,000 and an annual fee of 1% of franchise revenues. Franchise revenues were $20,000 during 2002. Gant projects future revenues of $40,000 in 2003 and $60,000 per year for the following three years. Gant uses the straight-line method of amortization. What amount should Gant report as intangible asset-franchise, net of related amortization in its December 31, 2002, balance sheet?

a. $48,000

b. $48,160

c. $49,920

d. $56,000

106. Slad Co. exchanged similar productive assets with Gil Co. and, in addition, paid Gil cash of $100,000. The following information pertains to this exchange:

<table>
<thead>
<tr>
<th>Assets</th>
<th>Carrying amounts</th>
<th>Fair values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relinquished by Gil</td>
<td>$75,000</td>
<td>$140,000</td>
</tr>
<tr>
<td>Relinquished by Slad</td>
<td>40,000</td>
<td>40,000</td>
</tr>
</tbody>
</table>

Slad thinks the transaction will significantly change the cash flows. Therefore, the transaction has commercial substance.

On Slad's books, the assets acquired should be recorded at what amount?

a. $75,000

b. $100,000

c. $140,000

d. $175,000

107. A building suffered uninsured fire damage. The damaged portion of the building was refurbished with higher quality materials. The cost and related accumulated depreciation of the damaged portion are identifiable. To account for these events, the owner should

a. Reduce accumulated depreciation equal to the cost of refurbishing.

b. Record a loss in the current period equal to the sum of the cost of refurbishing and the carrying amount of the damaged portion of the building.

c. Capitalize the cost of refurbishing and record a loss in the current period equal to the carrying amount of the damaged portion of the building.

d. Capitalize the cost of refurbishing by adding the cost to the carrying amount of the building.
Recently Disclosed Questions

108. On January 2, 20X3, Jann Co. purchased a $150,000 whole-life insurance policy on its president. The annual premium is $4,000. The company is both the owner and the beneficiary. Jann charged officers' life insurance expense as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X3</td>
<td>$ 4,000</td>
</tr>
<tr>
<td>20X4</td>
<td>3,600</td>
</tr>
<tr>
<td>20X5</td>
<td>3,000</td>
</tr>
<tr>
<td>20X6</td>
<td>2,200</td>
</tr>
<tr>
<td>Total</td>
<td>$12,800</td>
</tr>
</tbody>
</table>

In its December 31, 20X6 balance sheet, what amount should Jann report as investment in cash surrender value of officers' life insurance?

(a) $0
(b) $3,200
(c) $12,800
(d) $16,000

109. When a loan receivable is impaired but foreclosure is not probable, which of the following may the creditor use to measure the impairment?

I. The loan's observable market price.
II. The fair value of the collateral if the loan is collateral dependent.

(a) I only.
(b) II only.
(c) Either I or II.
(d) Neither I nor II.

110. Which of the following related-party transactions by a company should be disclosed in the notes to the financial statements?

I. Payment per diem expenses to members of the board of directors.
II. Consulting fees paid to a marketing research firm, one of whose partners is also a director of the company.

(a) I only.
(b) II only.
(c) Both I and II.
(d) Neither I nor II.

111. Lemu Co. and Young Co. are under the common management of Ego Co. Ego can significantly influence the operating results of both Lemu and Young. While Lemu had no transactions with Ego during the year, Young sold merchandise to Ego under the same terms given to unrelated parties. In the notes to their respective financial statements, should Lemu and Young disclose their relationship with Ego?

(a) Yes
(b) Yes
(c) No
(d) No

112. Wizard Co. purchased two machines for $250,000 each on January 2, 20X6. The machines were put into use immediately. Machine A has a useful life of five years and can only be used on one research project. Machine B will be used for two years on a research and development project and then used by the production division for an additional eight years. Wizard uses the straightline method of depreciation. What amount should Wizard include in 20X6 research and development expense?

(a) $75,000
(b) $275,000
(c) $375,000
(d) $500,000

113. Spiro Corp. uses the sum-of-the-years’ digits method to depreciate equipment purchased in January 20X6 for $20,000. The estimated salvage value of the equipment is $2,000 and the estimated useful life is four years. What should Spiro report as the asset’s carrying amount as of December 31, 20X8?

(a) $1,800
(b) $2,000
(c) $3,800
(d) $4,500

114. Dex Co. has entered into a joint venture with an affiliate to secure access to additional inventory. Under the joint venture agreement, Dex will purchase the output of the venture at prices negotiated on an arms-length basis. Which of the following is(are) required to be disclosed about the related party transaction?

I. The amount due to the affiliate at the balance sheet date.
II. The dollar amount of the purchases during the year.
   a. I only
   b. II only
   c. Both I and II
   d. Neither I nor II.

115. In its December 31, 20X4, balance sheet, Fleet Co. reported accounts receivable of $100,000 before allowance for uncollectible accounts of $10,000. Credit sales during 20X5 were $611,000, and collections from customers, excluding recoveries, totaled $591,000. During 20X5, accounts receivable of $45,000 were written off and $17,000 were recovered. Fleet estimated that $15,000 of the accounts receivable at December 31, 20X5, were uncollectible. In its December 31, 20X5, balance sheet, what amount should Fleet report as accounts receivable before allowance for uncollectible accounts?
   a. $58,000
   b. $67,000
   c. $75,000
   d. $82,000

116. Samm Corp. purchased a plot of land for $100,000. The cost to raze a building on the property amounted to $50,000 and Samm received $10,000 from the sale of scrap materials. Samm built a new plant on the site at a total cost of $800,000 including excavation costs of $30,000. What amount should Samm capitalize in its land account?
   a. $150,000
   b. $140,000
   c. $130,000
   d. $100,000

117. In its December 31 balance sheet, Butler Co. reported trade accounts receivable of $250,000 and related allowance for uncollectible accounts of $20,000. What is the total amount of risk of accounting loss related to Butler’s trade accounts receivable, and what amount of that risk is off-balance sheet risk?

<table>
<thead>
<tr>
<th>Risk of Accounting Loss</th>
<th>Off-Balance Sheet Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $0</td>
<td>$0</td>
</tr>
<tr>
<td>b. $230,000</td>
<td>$0</td>
</tr>
<tr>
<td>c. $230,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>d. $250,000</td>
<td>$20,000</td>
</tr>
</tbody>
</table>

118. The Maddox Corporation acquired land, buildings, and equipment from a bankrupt company at a lump-sum price of $90,000. At the time of acquisition, Maddox paid $6,000 to have the assets appraised. The appraisal disclosed the following values:

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$60,000</td>
</tr>
<tr>
<td>Buildings</td>
<td>40,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>20,000</td>
</tr>
</tbody>
</table>

What cost should be assigned to the land, buildings, and equipment, respectively?
   a. $30,000, $30,000, and $30,000
   b. $32,000, $32,000, and $32,000
   c. $45,000, $30,000, and $15,000
   d. $48,000, $32,000, and $16,000

119. Jole Co. lent $10,000 to a major supplier in exchange for a non-interest-bearing note due in three years and a contract to purchase a fixed amount of merchandise from the supplier at a 10% discount from prevailing market prices over the next three years. The market rate for a note of this type is 10%. On issuing the note, Jole should record:

<table>
<thead>
<tr>
<th>Discount on Note Receivable</th>
<th>Deferred Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

120. Miller Co. incurred the following computer software costs for the development and sale of software programs during the current year:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning costs</td>
<td>$50,000</td>
</tr>
<tr>
<td>Design of the software</td>
<td>150,000</td>
</tr>
<tr>
<td>Substantial testing of the project’s initial stages</td>
<td>75,000</td>
</tr>
<tr>
<td>Production and packaging costs for the first month’s sales</td>
<td>500,000</td>
</tr>
<tr>
<td>Costs of producing product masters after technology feasibility was established</td>
<td>200,000</td>
</tr>
</tbody>
</table>

The project was not under any contractual arrangement when these expenditures were incurred. What amount should Miller report as research and development expense for the current year?
   a. $200,000
   b. $275,000
   c. $500,000
   d. $975,000
121. Which of the following payments by a company should be disclosed in the notes to the financial statements as a related party transaction?

I. Royalties paid to a major stockholder as consideration for patents purchased from the shareholder.
II. Officers’ salaries.
   a. I only
   b. II only
   c. Both I and II.
   d. Neither I nor II.

122. On January 3, 2003, Quarry Co. purchased a manufacturing machine for $864,000. The machine had an estimated eight year useful life and a $72,000 estimated salvage value. Quarry expects to manufacture 1,800,000 units over the life of the machine. During 2003 Quarry manufactured 300,000 units. Quarry uses the units-of-production depreciation method. In its December 31, 2003, balance sheet, what amount of accumulated depreciation should Quarry report for the machine?
   a. $99,000
   b. $108,000
   c. $132,000
   d. $144,000

123. Cart Co. purchased an office building and the land on which it is located for $750,000 cash and an existing $250,000 mortgage. For realty tax purposes, the property is assessed at $960,000, 60% of which is allocated to the building. At what amount should Cart record the building?
   a. $500,000
   b. $576,000
   c. $600,000
   d. $960,000

124. Dex Co. has entered into a joint venture with an affiliate to secure access to additional inventory. Under the joint venture agreement, Dex will purchase the output of the venture at prices negotiated on an arms-length basis. Which of the following is (are) required to be disclosed about the related party transaction?

I. The amount of the purchases during the year.
II. The dollar amount of the purchases during the year.
   a. I only.
   b. II only.
   c. Both I and II.
   d. Neither I nor II.

125. Standard Co. spent $10,000,000 on its new software package that is to be used only for internal use. The amount spent is for costs after application development stage. The economic life of the product is expected to be three years. The equipment on which the package is to be used is being depreciated over five years. What amount of expense should Standard report on its income statement for the first full year?
   a. $0
   b. $2,000,000
   c. $3,333,333
   d. $10,000,000

126. Which of the following conditions must exist in order for an impairment loss to be recognized?

I. The carrying amount of the long-lived asset is less than its fair value.
II. The carrying amount of the long-lived asset is not recoverable.
   a. I only.
   b. II only.
   c. Both I and II.
   d. Neither I nor II.

127. Mellow Co. depreciated a $12,000 asset over five years, using the straight-line method with no salvage value. At the beginning of the fifth year, it was determined that the asset will last another four years. What amount should Mellow report as depreciation expense for year 5?
   a. $600
   b. $900
   c. $1,500
   d. $2,400

128. Which of the following is a research and development cost?

a. Development or improvement of techniques and processes.
b. Offshore oil exploration that is the primary activity of a company.
c. Research and development performed under contract for others.
d. Market research related to a major product for the company.

129. Green Co. incurred leasehold improvement costs for its leased property. The estimated useful life of the improvements was 15 years. The remaining
term of the nonrenewal lease was 20 years. These costs should be
a. Expensed as incurred.
b. Capitalized and depreciated over 20 years.
c. Capitalized and expensed in the year in which the lease expires.
d. Capitalized and depreciated over 15 years.

130. Yellow Co. spent $12,000,000 during the current year developing its new software package. Of this amount $4,000,000 was spent before it was at the application development state and the package was only to be used internally. The package was completed during the year and is expected to have a four-year useful life. Yellow has a policy of taking a full-year’s amortization in the first year. After the development stage, $50,000 was spent on training employees to use the program. What amount should Yellow report as an expense for the current year?
   a. $1,600,000
   b. $2,000,000
   c. $6,012,500
   d. $6,050,000

131. A manufacturing firm purchased used equipment for $135,000. The original owners estimated that the residual value of the equipment was $10,000. The carrying amount of the equipment was $120,000 when ownership transferred. The new owners estimate that the expected remaining useful life of the equipment was 10 years, with a salvage value of $15,000. What amount represents the depreciable base used by the new owners?
   a. $105,000
   b. $110,000
   c. $120,000
   d. $125,000

132. On January 16, Tree Co. paid $60,000 in property taxes on its factory for the current calendar year. On April 2, Tree paid $240,000 for unanticipated major repairs to its factory equipment. The repairs will benefit operations for the remainder of the calendar year. What amount of these expenses should Tree include in its third quarter interim financial statements for the three months ended September 30?
   a. $0
   b. $15,000
   c. $75,000
   d. $95,000

133. Stam Co. incurred the following research and development project costs during the current year:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment purchased for current and future projects</td>
<td>$100,000</td>
</tr>
<tr>
<td>Equipment purchased for current projects only</td>
<td>200,000</td>
</tr>
<tr>
<td>Research and development salaries for current projects</td>
<td>400,000</td>
</tr>
<tr>
<td>Legal fees to obtain patent</td>
<td>50,000</td>
</tr>
<tr>
<td>Material and labor costs for prototype product</td>
<td>600,000</td>
</tr>
</tbody>
</table>

The equipment has a five-year useful life and is depreciated using the straight-line method. What amount should Stam recognize as research and development expense at year end?
   a. $450,000
   b. $1,000,000
   c. $1,220,000
   d. $1,350,000

134. Which of the following expenditures qualifies for asset capitalization?
   a. Cost materials used in prototype testing.
   b. Costs of testing a prototype and modifying its design.
   c. Salaries of engineering staff developing a new product.
   d. Legal costs associated with obtaining a patent on a new product

135. On December 31, Year 1 Moon, Inc. authorized Luna Co. to operate as a franchisee for an initial franchise fee of $100,000. Luna paid $40,000 on signing the agreement and signed an interest-free note to pay the balance in three annual installments of $20,000 each, beginning December 31, Year 2. On December 31, Year 1 the present value of the note, appropriately discounted, is $48,000. Services for the initial fee will be performed in Year 2. In its December 31, Year 1 balance sheet, what amount should Moon report as unearned franchise fees?
   a. $0
   b. $48,000
   c. $88,000
   d. $100,000

136. A depreciable asset has an estimated 15% salvage value. Under which of the following methods, properly applied, would the accumulated depreciation equal the original cost at the end of the asset’s estimated useful life?

<table>
<thead>
<tr>
<th>Method</th>
<th>Straight-line</th>
<th>Double declining balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>c.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>d.</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

11Q-22
137. A company has a long-lived asset with a carrying value of $120,000, expected future cash flows of $130,000, present value of expected future cash flows of $100,000, and a market value of $105,000. What amount of impairment loss should be reported?
   a. $0  
   b. $5,000  
   c. $15,000  
   d. $20,000  

138. When the allowance method of recognizing uncollectible accounts is used, how would the collection of an account previously written off affect accounts receivable and the allowance for uncollectible accounts?
   
<table>
<thead>
<tr>
<th>Accounts receivable</th>
<th>Allowance for uncollectible accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Increase</td>
<td>Decrease</td>
</tr>
<tr>
<td>b. Increase</td>
<td>No effect</td>
</tr>
<tr>
<td>c. No effect</td>
<td>Decrease</td>
</tr>
<tr>
<td>d. No effect</td>
<td>Increase</td>
</tr>
</tbody>
</table>

139. Which of the following statements describes the proper accounting for losses when nonmonetary assets are exchanged for other nonmonetary assets?
   a. A loss is recognized immediately, because assets received should not be valued at more than their cash equivalent price.  
   b. A loss is deferred so that the asset received in the exchange is properly valued.  
   c. A loss, if any, which is unrelated to the determination of the amount of the asset received should be recorded.  
   d. A loss can occur only when assets are sold or disposed of in a monetary transaction.

140. Young Corp. purchased equipment by making a down payment of $4,000 and issuing a note payable for $18,000. A payment of $6,000 is to be made at the end of each year for three years. The applicable rate of interest is 8%. The present value of an ordinary annuity factor for three years at 8% is 2.58, and the present value for the future amount of a single sum of one dollar for three years at 8% is .735. Shipping charges for the equipment were $2,000, and installation charges were $3,500. What is the capitalized cost of the equipment?
   a. $19,480  
   b. $21,480  
   c. $24,980  
   d. $27,500  

141. Ajax Corp. has an effective tax rate of 30%. On January 1, Year 2, Ajax purchased equipment for $100,000. The equipment has a useful life of 10 years. What amount of current tax benefit will Ajax realize during Year 2 by using the 150% declining balance method of depreciation for tax purposes instead of the straight-line method?
   a. $1,500  
   b. $3,000  
   c. $4,500  
   d. $5,000  

142. Carr, Inc. purchased equipment for $100,000 on January 1, Year 1. The equipment had an estimated 10-year useful life and a $15,000 salvage value. Carr uses the 200% declining balance depreciation method. In its Year 2 income statement, what amount should Carr report as depreciation expense for the equipment?
   a. $13,600  
   b. $16,000  
   c. $17,000  
   d. $20,000  

143. Rue Co.'s allowance for uncollectible accounts had a credit balance of $12,000 at December 31, Year 2. During Year 3, Rue wrote-off uncollectible accounts of $48,000. The aging of accounts receivable indicated that a $50,000 allowance for uncollectible accounts was required at December 31, Year 3. What amount of uncollectible accounts expense should Rue report for Year 3?
   a. $48,000  
   b. $50,000  
   c. $60,000  
   d. $86,000  

144. After an impairment loss is recognized, the adjusted carrying amount of the intangible asset shall be its new accounting basis. Which of the following statements about subsequent reversal of a previously recognized impairment loss is correct?
   a. It is prohibited.  
   b. It is required when the reversal is considered permanent.  
   c. It must be disclosed in the notes to the financial statements.  
   d. It is encouraged, but not required.  

145. On January 1, Feld traded a delivery truck and paid $10,000 cash for a tow truck owned by Baker. The delivery truck had an original cost of $140,000, accumulated depreciation of $80,000, and an
estimated fair value of $90,000. Feld estimated the fair value of Baker's tow truck to be $100,000. The transaction had commercial substance. What amount of gain should be recognized by Feld?
   a. $0
   b. $3,000
   c. $10,000
   d. $30,000

**IFRS - PROPERTY, PLANT AND EQUIPMENT**

146. Under IFRS, Property, Plant and Equipment may be valued using which of the following models:
   a. Cost and revaluation models
   b. Cost and the present value models
   c. The revaluation and fair value models
   d. Cost and profit and loss models

147. Under IFRS, how often should a revaluation be done?
   a. Annually
   b. Every two years
   c. Every three years
   d. There is not a rule for frequency or date of revaluation

148. Under IFRS if the revaluation model is used for property plant and equipment. Where should the gain or loss be recognized?
   a. Profit and loss statement
   b. Retained earnings
   c. On other comprehensive income as revaluation surplus
   d. Extraordinary gain or loss

149. Under IFRS, Lipton Company uses the fair value model for the reporting of investment property. Where should the increases and decreases in fair value be reported?
   a. Profit and loss statement of the current period
   b. Other comprehensive income
   c. Retained earnings
   d. Extraordinary items

150. Under IFRS, what valuation models are used for intangible assets?
   a. Present value models
   b. Cost and revaluation models
   c. Cost and fair value models
   d. Fair value and revaluation models

151. Under IFRS, Salem Company uses the cost method for recording intangible assets. On July 1, Year 5, Salem purchased a patent for $200,000. On December 31, Year 5, the recoverable amount of the patent was $180,000. On December 31, Year 6, the recoverable amount for the patent was $190,000. What is the impairment gain or loss recognized in Year 5 and Year 6 on the income statement?
   Year 5          Year 6
   a. $20,000 loss     $10,000 gain
   b. $20,000 loss     $-0-
   c. $20,000 loss     $20,000 gain
   d. $-0-              $-0-

152. Under IFRS, what is true about biological assets?
   a. Assets found in the chemical industry
   b. Assets found in the biotech industry
   c. Biological assets are animals or plants and must be reported separately on the balance sheet.
   d. Biological assets must be valued at cost and be reported separately on the balance sheets.
Chapter Eleven
Other Assets, Liabilities, and Disclosures Problems

NUMBER 1
Gregor Wholesalers Co. sells industrial equipment for a standard three-year note receivable. Revenue is recognized at time of sale. Each note is secured by a lien on the equipment and has a face amount equal to the equipment's list price. Each note's stated interest rate is below the customer's market rate at date of sale. All notes are to be collected in three equal annual installments beginning one year after sale. Some of the notes are subsequently discounted at a bank with recourse, some are subsequently discounted without recourse, and some are retained by Gregor. At year end, Gregor evaluates all outstanding notes receivable and provides for estimated losses arising from defaults.

Required:

a. What is the appropriate valuation basis for Gregor's notes receivable at the date it sells equipment?

b. How should Gregor account for the discounting, without recourse, of a February 1, 20X6, note receivable discounted on May 1, 20X6? Why is it appropriate to account for it in this way?

c. At December 31, 20X6, how should Gregor measure and account for the impact of estimated losses resulting from notes receivable that it

1. Retained and did not discount?

2. Discounted at a bank with recourse?

NUMBER 2
Winter Sports Co. rents winter sports equipment to the public. Snowmobiles are depreciated by the double declining balance method. Before the season began, the estimated lives of several snowmobiles were extended because engines were replaced. Winter was given thirty days to pay for the engines. Winter gave the old engines to a local mechanic who agreed to provide repairs and maintenance service in the next year equal to the fair value of the engines. Rental skis, poles, and boots are capitalized and depreciated according to the inventory (appraisal) method.

Required:

a. How would Winter account for the purchase of the new engines and the transfer of the old engines to the local mechanic if the old engines’ costs are

1. Known?

2. Unknown?

b. 1. What are two assumptions underlying use of an accelerated depreciation method?

2. How should Winter calculate the snowmobiles’ depreciation?

c. How should Winter calculate and report the costs of the skis, poles, and boots in its balance sheets and income statements?
NUMBER 3

Number 4 consists of 14 items. Select the best answer for each item. Answer all items. Your grade will be based on the total number of correct answers.

Items 61 through 66 represent expenditures for goods held for resale and equipment.

Required:
For items 61 through 66, determine for each item whether the expenditure should be capitalized C or expensed as a period cost E.

61. Freight charges paid for goods held for resale.
62. In-transit insurance on goods held for resale purchased F.O.B. shipping point.
63. Interest on note payable for goods held for resale.
64. Installation of equipment.
65. Testing of newly-purchased equipment.
66. Cost of current year service contract on equipment.

Items 67 through 70 are based on the following 20X6 transactions:

- Link Co. purchased an office building and the land on which it is located by paying $800,000 cash and assuming an existing mortgage of $200,000. The property is assessed at $960,000 for realty tax purposes, of which 60% is allocated to the building.

- Link leased construction equipment under a 7-year capital lease requiring annual year-end payments of $100,000. Link's incremental borrowing rate is 9%, while the lessor's implicit rate, which is not known to Link, is 8%. Present value factors for an ordinary annuity for seven periods are 5.21 at 8% and 5.03 at 9%. Fair value of the equipment is $515,000.

- Link paid $50,000 and gave a plot of undeveloped land with a carrying amount of $320,000 and a fair value of $450,000 to Club Co. in exchange for a plot of undeveloped land with a fair value of $500,000. The land was carried on Club's books at $350,000. Since the economic position of neither company has changed, the cash flows should not change significantly. Therefore, the transaction lacks commercial substance.

Required:
For items 67 through 70, calculate the amount to be recorded for each item.

67. Building.
68. Leased equipment.
69. Land received from Club on Link's books.
70. Land received from Link on Club's books.
Items 71 through 74 are based on the following information:

On January 2, 20X6, Half, Inc. purchased a manufacturing machine for $864,000. The machine has an 8-year estimated life and a $144,000 estimated salvage value. Half expects to manufacture 1,800,000 units over the life of the machine. During 20X7, Half manufactured 300,000 units.

Required:

Items 71 through 74 represent various depreciation methods. For each item, calculate depreciation expense for 20X0 (the second year of ownership) for the machine described above under the method listed.

71. Straight-line.
72. Double-declining balance.
73. Sum-of-the-years'-digits.
74. Units of production.

NUMBER 4

Nan Co.'s property, plant, and equipment and accumulated depreciation and amortization balances at December 31, 20X4, are:

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Accumulated Depreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$ 275,000</td>
<td>—</td>
</tr>
<tr>
<td>Buildings</td>
<td>2,800,000</td>
<td>$ 672,900</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>1,380,000</td>
<td>367,500</td>
</tr>
<tr>
<td>Automobiles and trucks</td>
<td>210,000</td>
<td>114,326</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>432,000</td>
<td>108,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$5,097,000</td>
<td>$1,262,726</td>
</tr>
</tbody>
</table>

Additional information follows:

Depreciation and amortization methods and useful lives
Buildings—150% declining balance; 25 years.
Machinery and equipment—straight-line; 10 years.
Automobiles and trucks—150% declining balance; five years, all acquired after 20X2.
Leasehold improvements—straight-line.
Depreciation is computed to the nearest month.

Salvage values of depreciable assets are immaterial except for automobiles and trucks which have estimated salvage values equal to 15% of cost.

Other additional information
• Nan entered into a twelve-year operating lease starting January 1, 20X2. The leasehold improvements were completed on December 31, 20X1, and the facility was occupied on January 1, 20X2.
• On January 6, 20X5, Nan completed its self-construction of a building on its own land. Direct costs of construction were $1,095,000. Construction of the building required 15,000 direct labor hours. Nan's construction department has an overhead allocation system for outside jobs based on an activity denominator of 100,000 direct labor hours, budgeted fixed costs of $2,500,000, and budgeted variable costs of $27 per direct labor hour.
On July 1, 20X5, machinery and equipment were purchased at a total invoice cost of $325,000. Additional costs of $23,000 to rectify damage on delivery and $18,000 for concrete embedding of machinery were incurred. A wall had to be demolished to enable a large machine to be moved into the plant. The wall demolition cost $7,000, and rebuilding of the wall cost $19,000.

On August 30, 20X5, Nan purchased a new automobile for $25,000.

On September 30, 20X5, a truck with a cost of $48,000 and a carrying amount of $30,000 on December 31, 20X4, was sold for $23,500.

On November 4, 20X5, Nan purchased a tract of land for investment purposes for $700,000. Nan thinks it might use the land as a potential future building site.

On December 20, 20X5, a machine with a cost of $17,000, a carrying amount of $2,975 on date of disposition, and a market value of $4,000 was given to a corporate officer in partial liquidation of a debt.

Required: Use the worksheet below and on the next page.

a. Analyze the changes in each of the property, plant, and equipment accounts during 20X5 by completing Schedule No.1.

b. 1. For each asset category, prepare a schedule showing calculations for depreciation or amortization expense for the year ended December 31, 20X5. Round computations to the nearest whole dollar.
   2. Analyze the changes in accumulated depreciation and amortization by completing Schedule No. 2.

c. Prepare a schedule showing gain or loss on disposition of property, plant, and equipment.

a.

Schedule 1

Nan Co.
ANALYSIS OF CHANGES IN PROPERTY, PLANT, AND EQUIPMENT
For the Year Ended December 31, 20X5

<table>
<thead>
<tr>
<th></th>
<th>Balance 12/31/X4</th>
<th>Increase</th>
<th>Decrease</th>
<th>Balance 12/31/X5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$ 275,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buildings</td>
<td>2,800,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machinery &amp; equipment</td>
<td>1,380,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automobiles and trucks</td>
<td>210,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>432,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>$5,097,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b.2.

Schedule 2

Nan Co.
ANALYSIS OF CHANGES IN ACCUMULATED DEPRECIATION AND AMORTIZATION
For the Year Ended December 31, 20X5

<table>
<thead>
<tr>
<th></th>
<th>Balance 12/31/X4</th>
<th>Increase</th>
<th>Decrease</th>
<th>Balance 12/31/X5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings</td>
<td>$ 672,900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machinery &amp; equipment</td>
<td>367,500</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>114,326</td>
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<td></td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>108,000</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>$1,262,726</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### NUMBER 5

Kern, Inc., had the following long-term receivable account balances at December 31, 20X6:

- Note receivable from the sale of an idle building $750,000
- Note receivable from an officer 200,000

Transactions during 20X7 and other information relating to Kern's long-term receivables follow:

- The $750,000 note receivable is dated May 1, 20X6, bears interest at 9%, and represents the balance of the consideration Kern received from the sale of its idle building to Able Co. Principal payments of $250,000 plus interest are due annually beginning May 1, 20X7. Able made its first principal and interest payment on May 1, 20X7. Collection of the remaining note installments is reasonably assured.
- The $200,000 note receivable is dated December 31, 20X4, bears interest at 8%, and is due on December 31, 20X9. The note is due from Frank Black, president of Kern, Inc., and is collateralized by 5,000 shares of Kern's common stock. Interest is payable annually on December 31, and all interest payments were made through December 31, 20X7. The quoted market price of Kern's common stock was $45 per share on December 31, 20X7.
- On April 1, 20X7, Kern sold a patent to Frey Corp. in exchange for a $100,000 noninterest-bearing note due on April 1, 20X9. There was no established exchange price for the patent, and the note had no ready market. The prevailing interest rate for this type of note was 10% at April 1, 20X7. The present value of $1 for two periods at 10% is 0.826. The patent had a carrying amount of $40,000 at January 1, 20X7, and the amortization for the year ended December 31, 20X7, would have been $8,000. Kern is reasonably assured of collecting the note receivable from Frey.
- On July 1, 20X7, Kern sold a parcel of land to Barr Co. for $400,000 under an installment sale contract. Barr made a $120,000 cash down payment on July 1, 20X7, and signed a four-year 10% note for the $280,000 balance. The equal annual payments of principal and interest on the note will be $88,332, payable on July 1 of each year for the next four years. The fair value of the land at the date of sale was $400,000. The cost of the land to Kern was $300,000. Collection of the remaining note installments is reasonably assured.

**Required:**

Prepare the following and show supporting computations:

a. Long-term receivables section of Kern's December 31, 20X7, balance sheet.

b. Schedule showing current portion of long-term receivables and accrued interest receivable to be reported in Kern's December 31, 20X7, balance sheet.

c. Schedule showing interest revenue from long-term receivables and gains recognized on sale of assets to be reported in Kern's 20X7 income statement.

### NUMBER 6

On January 1, 20X7, the Pitt Company sold a patent to Chatham, Inc., which had a net carrying value on Pitt's books of $10,000. Chatham gave Pitt an $80,000 noninterest-bearing note payable in five equal annual installments of $16,000, with the first payment due and paid on January 1, 20X8. There was no established exchange price for the patent, and the note has no ready market. The prevailing rate of interest for a note of this type at January 1, 20X7, was 12%. Information on present value and future amount factors is as follows:

<table>
<thead>
<tr>
<th>Period</th>
<th>Present value of $1 at 12%</th>
<th>Present value of an annuity of $1 at 12%</th>
<th>Future amount of $1 at 12%</th>
<th>Future amount of an annuity of $1 at 12%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.89</td>
<td>0.89</td>
<td>1.12</td>
<td>1.00</td>
</tr>
<tr>
<td>2</td>
<td>0.71</td>
<td>1.69</td>
<td>1.25</td>
<td>2.12</td>
</tr>
<tr>
<td>3</td>
<td>0.64</td>
<td>2.40</td>
<td>1.40</td>
<td>3.37</td>
</tr>
<tr>
<td>4</td>
<td>0.57</td>
<td>3.04</td>
<td>1.57</td>
<td>4.78</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>3.60</td>
<td>1.76</td>
<td>6.35</td>
</tr>
</tbody>
</table>

11Q-29
Required:
Prepare a schedule showing the income or loss before income taxes (rounded to the nearest dollar) that Pitt should record for the years ended December 31, 20X7 and 20X8, as a result of the above facts. Show supporting computations in good form.

NUMBER 7
Portland Co. uses the straight-line depreciation method for depreciable assets. All assets are depreciated individually except manufacturing machinery, which is depreciated by the composite method.

During the year, Portland exchanged a delivery truck with Maine Co. for a larger delivery truck. It paid cash equal to 10% of the larger truck’s value. The transaction lacks commercial substance.

Required:
a. What factors should have influenced Portland’s selection of the straight-line depreciation method?
b. How should Portland account for and report the truck exchange transaction?
c. 1. What benefits should Portland derive from using the composite method rather than the individual basis for manufacturing machinery?
   2. How should Portland have calculated the manufacturing machinery’s annual depreciation expense in its first year of operation?

NUMBER 8
The following problem consists of 8 items. Select the best answer for each item. Answer all items.

During 20X5, Sloan, Inc. began a project to construct new corporate headquarters. Sloan purchased land with an existing building for $750,000. The land was valued at $700,000 and the building at $50,000. Sloan planned to demolish the building and construct a new office building on the site. Items 1 through 8 represent various expenditures by Sloan for this project.

Required:
For each expenditure in Items 1 through 8, select from the list below the appropriate accounting treatment.

   L. Classify as land and do not depreciate.
   B. Classify as building and depreciate.
   E. Expense.

Items to be answered:
1. Purchase of land for $700,000.
2. Interest of $147,000 on construction financing incurred after completion of construction.
3. Interest of $186,000 on construction financing paid during construction.
4. Purchase of building for $50,000.
5. $18,500 payment of delinquent real estate taxes assumed by Sloan on purchase.
6. $12,000 liability insurance premium during the construction period.
7. $65,000 cost of razing existing building.
8. Moving costs of $136,000.
Chapter Eleven
Solutions to Other Assets, Liabilities and Disclosures Questions

1. (b) A primary objective of accrual accounting is the proper matching of revenues and expenses. Since the allowance method accrues uncollectible accounts expense in order to match the cost against the revenues recognized in the period, it is consistent with accrual accounting. On the other hand, the direct write-off method usually writes off an account in a period that is different from the period in which the revenue is recognized and would not be consistent with the accrual method.

2. (a)

\[
\begin{array}{c|c|c|c}
\text{Allowance for Doubtful Accounts} & \text{Balance 1/1/05} & \text{2005 expense}^1 & \text{Balance 12/31/05} \\
 \hline
20X5 writeoffs & 18,000 & & 6,300 \\
 \hline
\end{array}
\]

\[13\% \times \$450,000\]

3. (d) The allowance account must be adjusted so that the ending balance is equal to the estimated uncollectible accounts receivable estimate—3% × 1,000,000 = $30,000.

4. (a) The aging method is a balance sheet approach that calculates the required ending balance in the allowance for uncollectible accounts. The calculation is as follows:

<table>
<thead>
<tr>
<th>Estimated % Uncollectible</th>
<th>Amount</th>
<th>Required Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1%</td>
<td>$120,000</td>
<td>$1200</td>
</tr>
<tr>
<td>2%</td>
<td>$90,000</td>
<td>$1800</td>
</tr>
<tr>
<td>6%</td>
<td>$100,000</td>
<td>$6000</td>
</tr>
</tbody>
</table>

Total required balance = $9000

5. (b)

I. Calculate the ending balance in the allowance for uncollectible accounts.

\[
\begin{array}{l}
\text{GIVEN: } \text{ACCOUNTS RECEIVABLE BALANCE 12/31/20X0} \quad \$350,000 \\
\text{Allowance for uncollectible accounts (calculate)} \quad (25,000) \\
\text{GIVEN: } \text{NET VALUE OF A/R AT 12/31/20X0} \quad \$325,000 \\
\end{array}
\]

II. Using a "T" account for the allowance and the ending balance from "I", calculate the uncollectible accounts expense.

\[
\begin{array}{l|c}
\text{ALLOWANCE FOR UNCOLLECTIBLE ACCOUNTS} & \\
\hline
\text{Accounts written off} & 18,000 \\
\text{Beginning Balance} & 30,000 \\
\text{Uncollectible recovery} & 2,000 \\
\text{EXPENSE (calculate)} & 11,000 \\
\hline
\text{Ending Balance (See I above)} & 25,000 \\
\end{array}
\]

11S-1
6. (c) The approach is to set up the T-account for accounts receivable.

\[
\begin{array}{ccc}
\text{Accounts Receivable} & \text{Beginning balance} & \$650,000 \\
& \text{Credit sales} & 2,700,000 \\
& \text{Sales returns} & 75,000 \\
& \text{Collections} & 2,150,000 \\
\hline
& \text{Ending balance} & $1,085,000
\end{array}
\]

Note that the journal entry for the estimated sales returns would be a debit to sales returns and a credit to the allowance for sales returns and would not affect the accounts receivables account.

7. (d) The estimate based upon sales is the expense for the year:

\[1,750,000 \times 2\% = \$35,000\]

The estimate based on accounts receivable is the balance in the allowance account:

- Allowance before 20X4 expenses = $16,000
- Ending balance ($900,000 \times 5\%) = $45,000
- Computed expense = $29,000

8. (c) The collection of cash has the impact of increasing the allowance account. (The allowance account was decreased when the account was written off.) The write-off of the account as well as the subsequent collection of the account has no effect on the expense.

9. (a) The entry to write off an account is a debit to the allowance account and a credit to the accounts receivable account. Since the allowance account is a contra account to accounts receivable and since both are balance sheet accounts, only (a) above is correct.

10. (b) The assignment of accounts receivable may be required when a company's receivables are collateral for a loan. Factoring normally involves an outright sale of a company's receivables. In either case, they are both used to generate cash from accounts receivable.

11. (d) The key phrase is "without recourse" which means that Gar Co. has transferred the risk for the uncollectible accounts to Ross Bank and Ross does not have any recourse against Gar Co. if the accounts are not collected. Thus, Gar has sold the accounts receivable to Ross Bank along with the risk associated with the uncollectible accounts.

12. (a) All of the items listed are considered in the cost of the land with the proceeds from the salvaged materials a reduction in the cost.

13. (a) The cost of the machine should include all the necessary cost to purchase the machine and get it ready for use. In this case that would include the purchase price of the machine plus the shipping and testing.

\[125,000 + 20,000 + 10,000 = 155,000\]

14. (a) All of the expenditures constitute a betterment and are therefore capitalized.

15. (a) The total realized gain is reported on the income statement. Therefore the new land is recorded at its full cost.

16. (a) The key point is that the cost of the machinery should be cash equivalent price of $110,000. The $130,000 total cash payments include $20,000 in interest. Interest cost should only be capitalized for assets that are being constructed.

\[
\begin{align*}
\text{Cost} & = \$110,000 \\
\text{Less Salvage Value} & = (5,000) \\
\text{Depreciation Base} & = 105,000 / 10 \text{ years} = 10,500 \\
\text{Depreciation per year} & = 10,500
\end{align*}
\]
17. (b)  

<table>
<thead>
<tr>
<th></th>
<th>Carrying Value</th>
<th>Accumulated Depreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>COST</td>
<td>$50,000</td>
<td></td>
</tr>
<tr>
<td>20X4 Depreciation</td>
<td>(20,000)</td>
<td>$20,000</td>
</tr>
<tr>
<td>40% × $50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20X5 Depreciation</td>
<td>(12,000)</td>
<td>12,000</td>
</tr>
<tr>
<td>40% × ($50,000 - 20,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance 12/31/X5</td>
<td>$18,000</td>
<td>$32,000</td>
</tr>
<tr>
<td>20X6 Depreciation</td>
<td>(6,000)</td>
<td>6,000</td>
</tr>
<tr>
<td>$18,000 / 3 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance 12/31/X6</td>
<td>$12,000</td>
<td>$38,000</td>
</tr>
</tbody>
</table>

Note: The percentage used in 200% double declining balance is \textbf{double} the straight line percentage (2 × 20% = 40%).

18. (a) Equipment cost $200,000  
Depreciation rate (1.5/5)  
30%  
Expense for 20X5 $ 60,000  

Carrying value 1/1/X6—$140,000  

Expense for 20X6 (.3 × $140,000)  
+ 42,000  

Accumulated depreciation at 12/31/X6  
($60,000 + $42,000) $102,000  
Salvage is not considered in the calculations.

19. (b) 5/15 + 4/15 = 9/15 × $300,000 = $180,000.

20. (d) The double-declining balance method has the highest depreciation in the first year (III). The sum-of-the-years'-digits method is slightly less in the first year and declines at a constant rate (II). The straight-line method is represented by (I).

21. (c) Since the machine suffered a permanent impairment of value, its carrying value should be adjusted to $200,000 at January 1, 20X5. At 12/31/X5, one year’s depreciation of $40,000 ($200,000 ÷ 5 years) is recorded. The carrying amount of the machine at 12/31/X5 is the new cost ($200,000) less the accumulated depreciation ($40,000) for a net of $160,000.

22. (b) Salvage value is normally used in the computation of depreciation except when using declining balance methods.

23. (a) The units-of-production method of depreciation measures depreciation based on use and is therefore a variable cost. Other depreciation methods such as straight line or accelerated methods are fixed costs and measure depreciation in relation to the passage of time.

24. (b) Salvage value is used in computing depreciation expense under both the straight-line and the units-of-production methods. If salvage value were excluded from the calculation in either method, the expense would be greater and as a result, net income would be understated.

25. (b) The loss is based upon the difference between the insurance proceeds and the carrying value (plus direct costs of removal). Therefore, the base used for determining the loss is $530,000.
26. (b) The solutions approach would be to set up a "T" and solve for the debit to Accumulated Depreciation.

<table>
<thead>
<tr>
<th>Retirements</th>
<th>$25,000</th>
<th>Balance 1/1/X6</th>
<th>$370,000</th>
<th>Depreciation – 20X6</th>
<th>55,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Balance 12/31/X6</td>
<td>$400,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

27. (b) Using the composite depreciation method, when an asset is sold the asset account is credited for the entire sales price. No gain or loss is recognized.

28. (b) Interest is capitalized on a building under construction because the building has not begun to generate revenue. To charge the interest incurred to interest expense during this construction period would be an improper matching of expenses and revenues. The interest cost capitalized is the lesser of the formula amount or the actual interest cost incurred. In this case the formula amount ($40,000) is the smaller amount and should be the amount charged to the building account. The formula for interest capitalization is:

\[
\text{Average Accumulated Expenditures} \times \text{Appropriate Interest Rate} \times \text{Time Period.}
\]

29. (a) Average costs incurred in 20X4 amounted to $1,000,000 which at 12% amounts to $120,000 interest cost. However, since the company's actual interest cost was less than $120,000, the actual interest cost is used.

30. (c) Interest incurred for routinely manufactured inventories is not capitalized. The other interest costs are appropriately capitalized under ASC 360.

31. (c) This is a non-reciprocal transfer. Non-reciprocal transfers are recorded at FMV (100,000 shares × $2.50 per share = $250,000). The difference between the FMV ($250,000) and the carrying value ($200,000) is recorded as a $50,000 gain.

32. (d) Since the transaction has commercial substance, the asset received should be recorded at fair value and a gain on the trade recorded immediately.

The gain is measured by the difference between the market value and the book value of the machine exchanged or $140,000 - $120,000 = $20,000. The new machine will be recorded at $140,000 + $15,000 or $155,000.

33. (b) Since the transaction has commercial substance, the asset received should be recorded at fair value and a gain on the trade recorded immediately.

| Fair value of computer | $43,000 |
| Book value of auto given up | $30,000 |
| Cash paid | 5,000 |
| **Total** | **$ 8,000** |

34. (b) Since the transaction has commercial substance, the asset received should be recorded at fair value and a loss on the trade recorded immediately.

In order to determine the loss, the trade-in value must be compared to the book value:

| Cash price of new machine = | $20,500 |
| Cash payment | 6,000 |
| Trade-in | 14,500 |
| Book value of old machine | 16,800 |
| Loss to be recognized | **$ 2,300** |
35. (b) Since the transaction lacks commercial substance, the asset received should be recorded at the book value of the asset(s) given up and the theoretical gain deferred. The theoretical gain is the fair value of the machine of $32,000 vs. the book value given up of $29,000 (cash of $19,000 + book value of old asset $10,000) for a theoretical gain of $3,000.

<table>
<thead>
<tr>
<th>Book value of old asset</th>
<th>$10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Paid</td>
<td>19,000</td>
</tr>
<tr>
<td>Recorded cost of new asset</td>
<td>$29,000</td>
</tr>
</tbody>
</table>

36. (a) Since the transaction lacks commercial substance, the asset received should be recorded at the book value of the asset(s) given up and the theoretical gain deferred. The theoretical gain is the $700,000 fair value of Terry vs the book value of $550,000 given up (cash of $50,000 plus the book value of Duff of $500,000) for a theoretical gain of $150,000. The journal entry would be

Terry, Player (cost) 550,000
Duff, Player 500,000
Cash 50,000

37. (b) Since the transaction lacks commercial substance and Good Deal received cash, a gain should be recognized on the portion of the asset sold and the “cost” of the new asset should be recorded at book value of the portion of asset traded.

Ratio: Monetary Consideration = $20,000 = 10%
Total Consideration $20,000 + $1880,000

Portion of book value applicable to monetary consideration = 10% x $160,000 = $16,000

<table>
<thead>
<tr>
<th>Monetary consideration</th>
<th>$20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less: Applicable book value</td>
<td>16,000</td>
</tr>
<tr>
<td>Gain realized</td>
<td>$ 4,000</td>
</tr>
</tbody>
</table>

Book value of asset given up $160,000
Less: Book value applicable to monetary consideration 16,000
Recorded amount of acquired asset $144,000

38. (d) The asset received should be recorded at the fair value of the asset given up or the asset received, whichever is more evident, and a gain or loss recognized immediately.

39. (c) The general rule is that the asset should be recorded at fair value. However, in this situation in which the fair value cannot be determined the FASB makes an exception and allows the recording of the asset at the book value of the asset(s) given up. May gave up two assets: the book value of the asset traded and cash so the answer would be (c).

40. (b) Goodwill is capitalized when incurred in the purchase of another entity. The cost of maintaining or developing goodwill is not capitalized because there is not an objective basis for measuring its value.

41. (c) Since the legal action for Patent B was unsuccessful, the related costs would be written off. Only the costs for Patent A are carried as an asset including the legal fees.

42. (a) The research development costs should be expensed because of the uncertainty associated with any R & D effort. However, the cost of registering the patent should be capitalized because it benefits future periods and should be amortized over its useful life of 10 years. In this case, the amortization for the last six months of 20X5 would be $1700 ($34,000 divided by 10 years x 6/12). The amount presented on the balance sheet would be the cost of $34,000 less the $1700 amortization or $32,300.
43. (c) $500,000 / 50 years = $10,000 per year.
Note: ASC 360 eliminated the arbitrary limit of 40 years for amortization of intangibles.

44. (c)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$50,000</td>
</tr>
<tr>
<td>Less 20X5 Amortization</td>
<td>(5,000)</td>
</tr>
<tr>
<td>December 31, 20X5 Balance</td>
<td>$45,000</td>
</tr>
</tbody>
</table>

The 3% franchise fee is a current variable expense and should not be capitalized because it does not benefit future periods.

45. (d) ASC 350 requires that organization cost be expensed as incurred. Therefore, none of the organization cost may be deferred.

46. (a) Using a service life method, the capitalized costs would be amortized on the basis of percentage of total projected sales. Therefore, 30% of the costs would be amortized in 20X8.

47. (b) Since the estimated life of the improvements (15 years) was less than the remaining lease term plus the option period (10 + 8 years), the 15-year amortization period is used:

- Cost of improvements $540,000
- 20X7 amortization ($540,000 ÷ 15) = 36,000
- Carrying value 12/31/X7 $504,000

48. (d) Research and development expenses are incurred prior to the production process in researching and developing a new product or process. Answers (a), (b) and (c) are incurred after production was in process. Only (d) is a pre-production R&D expense.

49. (d) Only the pre-production costs are recognized as R&D expenses. The $100,000 and $110,000 expenditures are costs incurred as part of the company's normal production.

50. (c) All costs incurred for producing and testing the prototype are R&D costs. The legal costs are capitalized as part of the cost of the patent. The special equipment, having no alternative use, is considered an R&D cost—it is not depreciated.

51. (c) If the purchase contract allows Ogden to purchase goods from the supplier for less than the prevailing market value, the difference between the contract price and the market rate should be recognized as interest revenue in connection with the loan (Per APB 21, Par. 7).

52. (a) There are seven payments due, the first one year after the initial date of the transaction. Therefore, the correct factor to use is the present value of an ordinary annuity for seven periods (4.712) or the present value of an annuity in advance for eight periods less one (5.712 – 1).

\[ 4.712 \times 20,000 = 94,240 \]

53. (a) The sales price is equivalent to the present value of the note payments:

- Present value of first payment $ 60,000
- Present value of last six payments: $60,000 × 4.36 = 261,600
- Sales price $321,600

Note that the present value of annuity factors which are given are "ordinary" annuity factors. Therefore, the present value of the first payment must be considered separately.
54. (b) In an exchange of a noninterest bearing note for equipment in which the fair market value of the equipment cannot be determined, the present value of the note must be computed using an imputed interest rate. The present value of the note is then assumed to equal the FMV of equipment. The interest income recognized on the note is the present value of the note at the beginning of the period ($600,000 \times 0.75 = $450,000) times the imputed interest rate ($450,000 \times 10\% \times 12/12 = $45,000).

55. (a) The journal entry to record the transaction is as follows:

- Notes Receivable $600,000
- Loss on Sale of Machinery $30,000
- Discount on Notes Receivable $150,000
- Equipment (carrying value) $480,000

56. (d) The note from Hart is reported at face value since it is made under customary terms and is for less than one year.

The carrying value of the Maxx note is reported at its discounted value as follows:

<table>
<thead>
<tr>
<th>Amount to be paid in five years:</th>
<th>$10,000 + ($300 \times 5) = $11,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value factor</td>
<td>.680</td>
</tr>
<tr>
<td>Carrying value</td>
<td>$7,820</td>
</tr>
</tbody>
</table>

57. (b) The proceeds received when a note is discounted at the bank is the maturity value of the note less the bank discount.

58. (c) The key point in calculating the cash received from discounting a note is to remember that the bank calculates its discount on the maturity value of the note times the bank discount rate times the time period that the note is held by the bank.

- Face value of the note $500,000
- Interest to maturity $500,000 \times 8\% \times 12/12 = 40,000
- MATURITY VALUE OF THE NOTE $540,000
- Less Bank Discount $540,000 \times 10\% \times 6/12 = (27,000)
- Cash proceeds $513,000

59. (c) As of June 30, 20X6, one payment of $50,000 has been made on the $150,000 original principal of the note. So the balance of the note from July 1, 20X5 to June 30, 20X6, has been $100,000. Therefore, the accrued interest receivable, the current asset, should be the accrued interest for 12 months ($100,000 \times 8\% \times 12/12 = $8,000).

60. (b) Since the note is dated July 15 and received on August 15, the assumption is that the selling price is equal to the principal of the note plus one month’s interest. Therefore, interest receivable is increased on the date of the transaction.

61. (c) Face value of the note $500,000
- Interest rate 12%
- Annual interest $60,000
- Two months accrual (2/12) $10,000

62. (b)

<table>
<thead>
<tr>
<th>TOTAL CASH PAYMENTS</th>
<th>$5,009 \times 5 \text{ years}</th>
<th>-</th>
<th>$25,045</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Present Value of the note</td>
<td>$19,485</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Interest Revenue</td>
<td>$5,560</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11S-7
63. (None - credit was given for all answers.) The vacation days were earned in 20X6 and should be accrued in 20X6. The cost accrued should be 6 employees × 10 days × $100 per day for a total of $6,000. The question is whether to accrue the sick pay. The key to the question is the word “should”. The problem asks what Baker Co. should accrue for sick pay. Since Baker estimates three days of sick pay will be taken, it should accrue three days to properly match expenses and revenues. The cost accrued should be 6 employees × 3 days × $100 for a total of $1,800. In summary the total accrued for compensated absences would be the vacation pay of $6,000 plus the sick pay of $1,800 for a total of $7,800.

64. (d) The liability for compensated absences at December 31, 20X5, is $15,000 for the 150 vacation days times $100 per day. The key word in dealing with sick pay is the word “required”. The problem asks what is the liability required at December 31, 20X5. Since the accrual of sick pay is optional, North Corp. would not be required to accrue a liability for sick pay.

65. (d) Wages subject to FICA = $80,000 × 7% = $5,600
Wages subject to unemployment = $20,000 × 3% = 600
Total payroll taxes accrued = $6,200

66. (c) Insurance expense is the difference between the annual advance premium and the increase in the cash surrender value of the policy. In this case the annual premium was $40,000 and the increase in the cash surrender value ($87,000 to $108,000) was $21,000. The difference of $19,000 would be reported as life insurance expense. The dividends in the problem are not a factor because they are included in the 12/31/X5 cash surrender value.

67. (c) The intercompany sales are eliminated in the consolidated statements and the officers' expenses and salaries are not related party transactions. Only the loans to officers need be disclosed.

68. (a) Current assets are assets that are expected to be converted to cash, used, or sold within one year or the operating cycle whichever is longer. In this case cash must be adjusted because even though the checks were recorded in June, they were not mailed and legally paid until July. Therefore, the checks ($30,000) must be added to the negative cash balance (-$10,000) to reach the adjusted cash balance of $20,000. In addition, the land held for resale should be reclassified to a current asset because Gold Corp. is selling the land in July of 20X5. In summary, the total current assets would be the adjusted cash ($20,000), the accounts receivable net ($35,000), inventory ($58,000), prepaid expenses ($12,000), and the land for resale ($100,000) for a total of $225,000.

69. (a) Two Key Points:
1. One half of the $500,000 accounts receivable with the special terms is current and the other half is noncurrent.
2. The income before tax is $1,000,000 ($3,600,000 Revenues less 2,600,000 in Expenses). Therefore, taxes are $300,000 (1,000,000 × 30%). After recording the tax expense and crediting the prepaid tax, the prepaid tax would have a zero balance.

Therefore, the total current assets would include the cash of $550,000 plus the accounts receivable of $1,650,000 reduced by the $250,000 noncurrent portion for a total of $1,950,000.

70. (c)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Balance in Retained Earnings</td>
<td>$630,000</td>
</tr>
<tr>
<td>Plus: Revenue</td>
<td>$3,600,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>(2,600,000)</td>
</tr>
<tr>
<td>Income before tax</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Tax Expense (30%)</td>
<td>(300,000)</td>
</tr>
<tr>
<td>Net Income</td>
<td>700,000</td>
</tr>
<tr>
<td>Ending Balance in Retained Earnings</td>
<td>$1,330,000</td>
</tr>
</tbody>
</table>

Note: The Foreign Currency translation adjustment account is a part of comprehensive income, not net income, and is closed into the stockholders’ equity account, accumulated other comprehensive income. (See Chapter 12 section on comprehensive income.)
71. (a) The answer can be determined by reviewing the journal entry for insurance costs:

```
  JE   Insurance Expense (Annual)   XX
        Cash Surrender Value of Life Insurance XX
              Cash   XX
```

72. (d) A note discounted with recourse creates a contingent liability for the face of the note plus any interest due on the note. Since this note is a noninterest bearing note, the contingent liability disclosed in the financial statements would be $20,500.

73. (d)

<table>
<thead>
<tr>
<th>Cost</th>
<th>Carrying Value</th>
<th>Accumulated Depreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated Depreciation</td>
<td>(420,000)</td>
<td>$420,000</td>
</tr>
<tr>
<td>Carrying Value 1/1/X5</td>
<td>$480,000</td>
<td></td>
</tr>
<tr>
<td>Writedown (loss) due to obsolescence</td>
<td>(180,000)</td>
<td>180,000</td>
</tr>
<tr>
<td>Adjusted Carrying Value 1/1/X5</td>
<td>$300,000</td>
<td></td>
</tr>
<tr>
<td>Depreciation for 20X5</td>
<td>$300,000 / 3 years</td>
<td>(100,000) 100,000</td>
</tr>
<tr>
<td>Balance 12/31/X5</td>
<td>$200,000</td>
<td>$700,000</td>
</tr>
</tbody>
</table>

74. (c) Since the first payment was made on December 30, 20X4, the note should be reported on the December 31, 20X4, balance sheet at $62,500 which is the present value of the remaining nine payments ($10,000 x 6.25).

75. (a) The key point is that Jamin Co. is using the income statement approach for estimating uncollectible accounts. In this case, the estimated uncollectible accrued expense would be $180,000 (2% x $9,000,000 credit sales). Therefore, the ending balance in the allowance account should be calculated as follows:

```
ALLOWANCE FOR UNCOLLECTIBLE ACCOUNTS
Beginning Balance   $260,000
Accrual (see above)  180,000
Write offs           (325,000)
Ending Balance       $115,000
```

76. (a) Theoretically all necessary cost to purchase the machine and get it ready for use should be capitalized. Both of these costs are necessary to purchase the asset and should be capitalized.

77. (c) Costs attributable to land: $60,000 + $2,000 + $5,000 – $3,000 = $64,000
Costs attributable to building: $8,000 + $350,000 = $358,000

78. (d)

I. Collections from CASH sales
   - Gross Sales $80,000
   - less Returns & Allowances (4,000)
   - Collections from cash sales $76,000

II. Collections from CREDIT sales
   - Accounts Receivable 1/1/X5 $40,000
   - Credit Sales (120,000 - 6,000) 114,000
   - Less Accounts Receivable 12/31/X5 (30,000)
   - Collections from credit sales 124,000

TOTAL CASH COLLECTIONS $200,000
79. (b) Two Key Points:
A. Under DDB the salvage value is ignored in the initial years.
B. The percentage used is double the straight-line percentage. In this case, the percentage is 50% (2 x 25%).

<table>
<thead>
<tr>
<th>Depreciation Schedule for Calculation of Depreciation Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X4  $80,000 x 50% = 40,000</td>
</tr>
<tr>
<td>20X5  ($80,000 - 40,000) x 50% = 20,000</td>
</tr>
<tr>
<td>20X6  ($80,000 - 40,000 - 20,000) x 50% = 10,000</td>
</tr>
</tbody>
</table>

80. (d) The accrued interest at end of the first year, February 28, 20X5, is $1200 ($10,000 X 12% = 1200). The interest for the remaining 10 months is compounded based on the carrying amount of the total liability at February 28, 20X5, $11,200 ($10,000 principal plus the $1200 accrued interest). Therefore, the interest is $11,200 x 12% X 10/12 = $1120 for the last 10 months. The accrued interest liability at December 31, 20X5, would be the total interest for the two time periods, $1200 + $1120 = $2320.

81. (b) The $45,000 capitalized cost of the patent was amortized at $3,000 per year ($45,000/15 years) for 20X3, 20X4, and 20X5, which reduced the carrying amount to $36,000. The cost of the successful defense of the patent ($15,000) is added to the carrying amount for a total of $51,000. Therefore, the gain on the sale is $24,000 ($75,000 – $51,000).

82. (c) On theory questions such as Crater, Inc., the solutions approach is to set up a simple numerical example:

<table>
<thead>
<tr>
<th>Cost of equipment</th>
<th>$20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salvage value (20%)</td>
<td>$4,000</td>
</tr>
<tr>
<td>Sold equipment</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

Sum-of-the-years-digits approach:

\[
\text{Accumulated depreciation} = \frac{(10 + 9 + 8 + 7 + 6)}{55} = 11,636
\]

\[
\text{Gain/loss} = \text{Selling price – book value} = 10,000 – (20,000 – 11,636) = 10,000 – 8,364 = 1,636
\]

Double-declining balance method will depreciate the asset faster than sum-of-the-years-digits because it ignores salvage value initially. Therefore, DDB would report a higher gain than SYD.

Composite method does not recognize a gain or loss on early retirement.

**Straight-line method**

- Depreciation = \((20,000 - 4,000) \div 10 = 1,600\)
- Accumulated Dep. = \(1,600 \times 5 = 8,000\)
- Loss = Selling price – book value = 10,000 – (20,000 – 8,000) = 2,000 loss

83. (b) Carrying value of note on 1/1/X4 = .75 x $400,000 = $300,000

<table>
<thead>
<tr>
<th>Interest rate</th>
<th>10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest income</td>
<td>$30,000</td>
</tr>
</tbody>
</table>

84. (d) The principal would have to be due in 20X4 to be considered as a noncurrent asset at April 30, 20X3. The accrued interest for eight months (since August 31, 20X2) is a current asset at April 30, 20X3. Since the principal is due August 31, 20X4, additional interest would have to be recorded for the period September 1, 20X3 to August 31, 20X4. Therefore, the answer is (d). This is the only answer in which the principal is due in 20X4 and includes interest for the two fiscal years.
85. (d) All costs incurred until the machine is ready for use are part of the machine's cost.

86. (d) Research and development is the search for new knowledge in the hope of developing a new product or service. Since Brill Co.'s costs to develop computer software is for internal use and not for a new product, these costs would be charged to general and administrative expenses and not research and development. The marketing research costs would be charged to selling expenses.

87. (c)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost 1/1/X2</td>
<td>$90,000</td>
</tr>
<tr>
<td>Less Amortization</td>
<td></td>
</tr>
<tr>
<td>$90,000 / 10 years = $9,000</td>
<td></td>
</tr>
<tr>
<td>per year × 3 years</td>
<td>(27,000)</td>
</tr>
<tr>
<td>CARRYING VALUE 1/1/X5</td>
<td>$63,000</td>
</tr>
</tbody>
</table>

Since the patent will not benefit Lava Inc. beyond the current year, the total 1/1/X5 carrying value should be charged to the income statement in 20X5. The $9,000 amortization per year would be charged to expense and the remaining $54,000 would be charged as a loss on the patent.

88. (c) Annual payments on the note:

\[
\text{Payment} \times 3.992 = $20,000
\]

\[
\text{Payment} = $5,010
\]

Present value of the payments @ 9%:

\[
$5,010 \times 3.890 = $19,490
\]

This amount represents the purchase price of the note.

Total of all payments—$5,010 × 5 = $25,050

Carrying value of the note = 19,490

Interest to be recognized = $5,560

89. (c) Balance in the liability account at 10/1/X6 = $15,000

Additional expense due to pay raise @ 10% = $1,500

20X6 expense at current pay rates = $30,000

Total expense for 20X6 = $31,500

90. (a) Since the case on patent A34 is weak, the legal cost should be charged to expense. The company has a strong case on patent B19 and the legal cost should be capitalized. The theory for capitalization of the legal costs is that the costs will benefit future periods.

91. (d) Research and Development costs incurred from employing outside companies, preproduction cost and cost incurred for searching for new products or process alternatives would all be considered R & D costs. Therefore, the total costs of $525,000 ($150,000 + 200,000 + 175,000) would be the answer.

92. (b) The legal fees and other cost associated with the patent should be capitalized because these costs will benefit future periods. The total of these costs are $82,000. The R&D costs should be expensed.

93. (a) The costs capitalized as patent are the direct costs of obtaining the patent other than research and development expenditures which are expensed. The registration costs of $30,000 and the legal fees of $45,000 paid for the successful defense of the patent are charged to the patent account.
94. (b) Since the transaction lacks commercial substance and Amble received cash, a gain should be recognized on the portion of the asset sold and the “cost” of the new asset should be recorded at the book value of the portion of the asset traded.

\[
\text{Portion of carrying value sold} = \frac{\text{Boot}}{\text{Boot} + \text{FMV of new truck}} \times \text{Carrying value}
\]

\[
= \frac{\$5,000}{\$5,000 + \$15,000} \times \$12,000
\]

Portion of carrying value sold = $3,000

b. Portion of carrying value traded = Total carrying value – Portion of CV sold

= $12,000 – $3,000

Portion of carrying value traded = $9,000

The portion of the carrying value traded is the cost of the new truck - $9,000. The theory is that the earnings process is not complete on the portion of the asset traded, and since similar assets were traded, none of the theoretical gain should be recognized. The earnings process is assumed to be complete on the portion of the CV sold and the gain should be recognized ($5,000 – $3,000 = $2,000 gain recognized).

95. (c) The theoretical gain on the trade is the FMV of the inventory ($21,000) less the carrying value of the inventory ($20,000) for a total gain of $1,000. In a trade of similar assets in which Beam pays boot and has a theoretical gain, the gain is not recognized ($0) and the inventory received is recorded at the carrying value of the inventory traded ($20,000) plus the boot ($1,000) for a total of $21,000. The theory is that the earnings process is not complete.

96. (b) The method which records the most depreciation in the first two years would cause the higher gain or lower loss upon sale. The percent of cost depreciated in the first two years is:

- Sum of years' digits depreciation is 5/15 + 4/15 or 9/15 or 60%.
- Double declining balance is 40% + (40% × 60%) or 64%.

Therefore, using sum-of-the-years' digits would reduce the gain and increase the loss upon sale.

97. (a) Since the carrying amount of the asset surrendered exceeds the fair value of the asset received and there is not any boot, a loss on the transaction is recorded and new asset is recorded at the fair value of the asset received. This is true regardless of whether the transaction has commercial substance or whether the transaction lacks commercial substance.

98. (b) Only Ryan’s vacation pay is accrued since Todd’s does not vest or accumulate.

99. (c) The amount accrued as commissions for each salesperson will be any commissions due over and above the fixed salary as follows:

<table>
<thead>
<tr>
<th>Salesperson</th>
<th>Fixed salary</th>
<th>Commissions</th>
<th>Excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$10,000</td>
<td>$8,000</td>
<td>$— 0 —</td>
</tr>
<tr>
<td>B</td>
<td>$14,000</td>
<td>$24,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>C</td>
<td>$18,000</td>
<td>$36,000</td>
<td>$18,000</td>
</tr>
</tbody>
</table>

The accrual is $28,000.

100. (a) Trade installment receivables normally collectible in 18 months would be classified as current, since this is industry practice.

101. (a) The goods on consignment have not been sold and the amount is not included in accounts receivable. The security deposit is not a receivable. The claim against the shipper is appropriately included as a receivable.
102. (a) A recovery of an account which was previously written off is an increase in cash and a credit to the allowance account.

103. (a) The allowance for sales discounts should be calculated from the group of sales in the 0 - 15 days category that could qualify for the sales discount. Since only 50% of this group is expected to take advantage of the discount, the calculation would be $100,000 × 50% × 2% = $1,000.

104. (a) Since the transaction has commercial substance the new asset received should be recorded at the fair value received or the fair given up whichever is more evident. The fair value of the stock received is not available so the fair value of the truck given up ($3,000) should be the "cost" of the asset, Investment in Stock of Ace, and a gain of $500 recognized on the transaction.

105. (a) The Franchise Amortization per year is the cost of $60,000 divided by the five-year estimated life for an annual cost of $12,000 per year. Since this is the first year of amortization, the balance sheet should report the cost of $60,000 less the $12,000 amortization for an intangible asset-franchise net of $48,000.

The 1% of revenues is a variable annual cost and is not a capitalizable cost because it will not generate future revenues.

106. (c) Since the transaction has commercial substance, the new asset should be recorded at the fair value received or the fair value given up whichever is more evident. In this case the fair value received of $140,000 and the fair value given up of $140,000 (cash of $100,000 + asset of $40,000) are the same and the answer should be $140,000.

107. (c) The key point is that the cost and related accumulated depreciation of the damaged portion are identifiable and can be removed from the accounts with the appropriate loss recognized. The new cost of refurbishing should be capitalized and depreciated over the future periods benefited.

108. (b) The amount of the investment in cash surrender value to be reported on Jann Co.’s December 31, 20X6 balance sheet is $3,200. This is calculated by comparing the amount paid for annual premiums, $16,000 (4 years x $4,000), to the amount charged to life insurance expense of $12,800 ($16,000 - $12,800 = $3,200).

109. (c) According to ASC 310, when a loan receivable is impaired but foreclosure is not probable, a creditor may measure the impairment by using either the loan's observable market price or the fair value of the collateral if the loan is collateral dependent.

110. (b) ASC 235 established formal requirements for disclosure of material related-party transactions. Consulting fees paid to a marketing research firm, one of whose partners is also a director of the company is an example of a related-party transaction that must be disclosed. Expense allowances incurred in the ordinary course of business such as the payments per diem expenses of the members of the board of directors are specifically excluded from disclosure.

111. (a) ASC 235 requires the disclosure of related parties in situations in which one party controls or can significantly influence the management or operating policies of the reporting entity. Since Lemu and Young are under common management of Ego Co., the relationship must be disclosed.

112. (b) The key point is that if a machine can only be used on one project, the total cost of that machine should be charged to expense in the year of acquisition because the future life of a research project is uncertain. Therefore, the cost of machine A ($250,000) should be charged to expense in 20X6.

Machine B has other uses beyond R&D and should be depreciated over the useful life of 10 years ($250,000 / 10 years) for an annual depreciation of $25,000.

The total cost included in R&D expense should be $250,000 for machine A and $25,000 for machine B, for a total cost of $275,000.
113. (c) Under the sum-of-the-year’s digits method, the denominator in the fraction is used to calculate the yearly depreciation as the sum of the year’s digits or \(1 + 2 + 3 + 4 = 10\). The numerators are the year’s digits in declining order or 4, 3, 2, 1. Therefore, the fraction used in 20X6 would be \(4/10\); 20X7 \(3/10\); 20X8 \(2/10\) for an accumulated total of \(9/10\).

The accumulated depreciation would then be \(9/10 \times (\$20,000 \text{ cost} - \$2,000 \text{ salvage value})\) for a total of \$16,200.

The equipment’s carrying value at December 31, 20X8, would be the cost of \$20,000 less the accumulated depreciation of \$16,200 for a total of \$3,800.

114. (c) ASC 323 requires that joint ventures with an affiliate disclose the nature of the relationship, the dollar amount of purchases during the year and the amount due to the affiliate at the balance sheet date.

115. (c) The solutions approach is to use a “T” account.

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Balance</td>
<td>100,000</td>
</tr>
<tr>
<td>Credit Sales</td>
<td>611,000</td>
</tr>
<tr>
<td>Collections</td>
<td>591,000</td>
</tr>
<tr>
<td>Ending Balance</td>
<td>75,000</td>
</tr>
<tr>
<td>Write-offs</td>
<td>45,000</td>
</tr>
</tbody>
</table>

Note: The \$17,000 of recoveries do not affect accounts receivable. A recovery is a debit to cash and a credit to the allowance for uncollectible accounts.

116. (b) The cost of the land should be the necessary cost to purchase the land and get it ready for its intended use. Therefore, the purchase price plus the cost of razing the old building less the sale of scrap materials should be capitalized \((\$100,000 + \$50,000 - \$10,000 = \$140,000)\). The excavation cost to build the foundation would be a cost of the building.

117. (b) The risk of loss associated with the trade accounts receivable is the net realizable value of the receivables \((\$250,000 - \$20,000 = \$230,000)\). There is not an off-balance sheet risk associated with trade accounts receivable.

118. (d) Allocation of lump sum purchase price:

<table>
<thead>
<tr>
<th>Description</th>
<th>FMV</th>
<th>Ratio to FMV</th>
<th>x</th>
<th>Lump Sum</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$60,000</td>
<td>(60/120 = 3/6)</td>
<td>x</td>
<td>$96,000</td>
<td>$48,000</td>
</tr>
<tr>
<td>Bldgs</td>
<td>40,000</td>
<td>(40/120 = 2/6)</td>
<td>x</td>
<td>96,000</td>
<td>32,000</td>
</tr>
<tr>
<td>Equip.</td>
<td>20,000</td>
<td>(20/120 = 1/6)</td>
<td>x</td>
<td>96,000</td>
<td>16,000</td>
</tr>
<tr>
<td>Total</td>
<td>$120,000</td>
<td></td>
<td></td>
<td></td>
<td>$96,000</td>
</tr>
</tbody>
</table>

119. (a) This is an exchange of cash for non-interest-bearing note plus the right to purchase merchandise at a discount. Substance over form would require that the note be recorded at the present value and reported at the face value of the note less the discount on the note. The right to buy merchandise at a discount would be reported as a deferred charge.
120. (b) The key concept for cost incurred in the development of computer software is “technology feasibility”. All research and development cost incurred prior to the attainment of technology feasibility should be charged to R & D expense. Therefore, the planning cost, design of the software and the testing cost should be R & D expense: $50,000 + $150,000 + $75,000 = $275,000. All the other costs in the problem were incurred after the attainment of technology feasibility.

121. (a) Royalties paid to a major shareholder as consideration for patents purchased from the shareholder have the potential to not be an objective, unbiased, arms-length transaction; so it should be disclosed as a related party transaction. However, items such as officers’ salaries, travels expenses, and intercompany transactions are not considered as related party transactions.

122. (c) The first step is to calculate the depreciation per unit produced: cost-salvage value/est. units produced $864,000 - $72,000/1,800,000 units = $.44 per unit the second step is to multiply the depreciation per unit times the units produced in 2003: 

$.44 per unit x 300,000 units produced = $132,000. Therefore, the depreciation expense and the accumulated depreciation for 2003 would be $132,000.

123. (c) The lump-sum cost of the office building and land is $1,000,000 ($750,000 cash plus $250,000 mortgage). In allocating the lump-sum between the office building and land, an objective basis for the allocation such as the property tax assessment should be used since the building is 60% of the property tax value, the cost of the building should be 60%x the lump-sum cost of $1,000,000 or $600,000. Do not be confused by the fact that the total tax value of $960,000 is less than the lump-sum cost of $1,000,000. This is fairly common in the “real world”.

124. (c) A joint venture is a business association of two or more owners acting together for profit for a limited purpose (to secure access to additional inventory) and for limited duration. Since Dex and the joint venture are related parties, Dex must disclose the amount due to the affiliate at the balance sheet date and the dollar amount of the purchase during the year. The statement that Dex will “purchase the output of the venture at prices negotiated on an arms length basis” does not negate the required related party disclosures (ASC 235) page 11-24.

125. (c) For internally developed software the key term is technological feasibility or development stage. Any cost incurred before the software reaches technological feasibility or the development stage is expensed because of the uncertainty about the feasibility of the usefulness of the software. Once the software reaches technological feasibility or the development stage then any future cost should be capitalized. In this case the $10,000,000 should be capitalized as an intangible asset and amortized over the software’s useful life of three years for annual amortization of $3,333,333.

126. (b) An impairment loss is recognized when the carrying amount of the long-lived asset is more not less than its fair value and the carrying amount of the long-lived asset is not recoverable.

127. (a) This is considered a change in accounting estimate. This type of change is not retroactive so the book value at the beginning of the fifth year is calculated and spread evenly on a straight-line basis as depreciation expense over the next four years.

<table>
<thead>
<tr>
<th>Cost</th>
<th>$12,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Accumulated Depreciation</td>
<td></td>
</tr>
<tr>
<td>$12,000</td>
<td></td>
</tr>
<tr>
<td>5 years x 4 years</td>
<td>(9,600)</td>
</tr>
</tbody>
</table>

= Carrying Value

January 1 year 5 $ 2,400

Divided by

Remaining useful life 4 years

= Depreciation Expense year 5 $600
128. (a) R & D is a search for and the development of new knowledge, so answer A would be correct. B is incorrect because it is not a search for new knowledge. C is wrong because the cost of R & D performed for others it will be billed to the other companies and is not an expense to the company performing the R & D. D is incorrect because market research is a marketing cost and is not R & D.

129. (d) Leasehold improvements that benefit the company for more than one accounting period should be capitalized and depreciated over the smaller of the length of the lease term or the useful life of the improvements since the useful life of the improvement is 15 years and the term of the lease is 20 years. The improvements should be capitalized and depreciated over 15 years.

130. (d) Yellow Co. should capitalize $8,000,000 which is the cost after the project reached the development stage ($12,000,000 – $4,000,000). Yellow should expense the following cost related to the project for the current year:

<table>
<thead>
<tr>
<th>Cost Prior to Development</th>
<th>$4,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amortization of Software</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Training Cost</td>
<td>$50,000</td>
</tr>
<tr>
<td>Total Expense Current Year</td>
<td>$6,050,000</td>
</tr>
</tbody>
</table>

132. (d) In order to properly match the revenues to the expenses, the property taxes of $60,000 would be spread equally over four quarters for a cost of $15,000 per quarter. Since the major repairs were not made until the beginning of the second quarter the cost of $240,000 would be allocated to the remaining three quarters for a cost of $80,000 per quarter. Therefore, the total expense would be $15,000 for the property taxes and $80,000 for the major repairs for a total of $95,000 for the third quarter.

133. (c) The research and development expense would be calculated as follows:

<table>
<thead>
<tr>
<th>Depreciation on equipment</th>
<th>$20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment purchased for current projects</td>
<td>$200,000</td>
</tr>
<tr>
<td>R &amp; D salaries for current projects</td>
<td>$400,000</td>
</tr>
<tr>
<td>Material and Labor cost for prototype</td>
<td>$600,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,220,000</strong></td>
</tr>
</tbody>
</table>

Note: The depreciation on equipment is calculated by dividing the cost of $100,000 by the useful life of five years for a depreciation of $20,000 per year.

The legal fees to obtain a patent are capitalized as a cost of the patent and are not a part of R & D expense.

134. (d) Legal costs associated with obtaining a patent on a new product are necessary costs to obtain the intangible asset and should be capitalized. To expense the legal costs would be incorrect because revenue was not generated by the expenditure and there would not be a matching of revenue to expense. Answers A, B, and C are cost of developing a new product and should be charged to Research and Development expense.

135. (c) The present value of the unearned franchise fees at December 31, Year 1 should be the initial down payment of $40,000 plus the present value of the future payments of $48,000 for a total of $88,000. The key point is that services to earn the fees will not begin until Year 2.

136. (d) All depreciation methods will depreciate down to the salvage value of 15%. Therefore, the accumulated depreciation will be 85% of the original costs. Candidates may be confused by the double-declining balance approach. In the DDB method, depreciation expense is initially calculated by ignoring the 15% salvage value. However, the DDB approach still depreciates down to salvage value and then stops the calculation of any future depreciation.
137. (a) If the expected future cash flows ($130,000) of the asset exceed the carrying value of the asset ($120,000), an impairment loss is not recognized. Remember, it is the gross amount of the future cash flows and not the present value amount.

138. (d) The journal entry would be as follows:

JE Cash
    Allowance for uncollectible accounts

Therefore, there would be no effect on accounts receivable and an increase in the allowance account.

139. (a) Conservatism would require that a loss be recognized and the asset received recorded at its cash equivalent price. B is incorrect because conservatism does not allow the deferral of a loss. C is wrong because the loss should be related to the asset received. D is incorrect because assets can be traded without having cash involved.

140. (c) The capitalized cost of the equipment is as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Down payment</td>
<td>$ 4,000</td>
</tr>
<tr>
<td>Present value of the note</td>
<td>15,480</td>
</tr>
<tr>
<td>Shipping cost</td>
<td>2,000</td>
</tr>
<tr>
<td>Installation charges</td>
<td>3,500</td>
</tr>
<tr>
<td><strong>Total cost</strong></td>
<td><strong>$24,980</strong></td>
</tr>
</tbody>
</table>

Note: The present value of the note is the annual payments of $6,000 times the present value factor for an annuity for 3 year (2.58) for a total of $15,480.

141. (a) The depreciation expense under the straight-line method is $100,000 cost divided by 10 years = $10,000. The depreciation expense under the 150% declining balance method is 150% x $100,000 = $15,000. Difference in depreciation is $5,000. The difference in depreciation of $5,000 times the tax rate of 30% equals a current tax benefit of $1,500.

142. (b) The depreciation expense for double declining balance on $200% declining balance method is to multiply a constant fraction of 20% (two times the straight-line rate of 10%) times the beginning of the period carrying value of the equipment.

Year 1 20% X $100,000 = $20,000
Year 2 20% X ($100,000 - $20,000) = $16,000

Note: In DDB the salvage value is ignored initially but the equipment is depreciated down to salvage value and the depreciation stops.

143. (d) The solutions approach would be to use a "T" account and plug the uncollectible accounts expense or use an equation and solve for uncollectible accounts expense.

<table>
<thead>
<tr>
<th>Allowance for uncollectible Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 3 write offs 48,000</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>JE uncollectible accounts expense</td>
</tr>
<tr>
<td>Allowance for uncollectible accounts</td>
</tr>
</tbody>
</table>
144. (a) Once an intangible asset is written down for an impairment, ASC 350 does not allow for a subsequent reversal in future years even though the intangible may have recovered or exceeded its previous fair value.

145. (d) If the transaction has commercial substance, a gain on the trade should be recognized. The gain can be calculated by comparing the fair value of the old truck ($90,000) to the carrying value of the old truck ($60,000) for a gain of $30,000.

<table>
<thead>
<tr>
<th>JE</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tow truck (fair value)</td>
<td>100,000</td>
<td></td>
</tr>
<tr>
<td>Acc Dep - Delivery Truck</td>
<td>80,000</td>
<td></td>
</tr>
<tr>
<td>Delivery Truck-cost</td>
<td>140,000</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Gain on trade</td>
<td>30,000</td>
<td></td>
</tr>
</tbody>
</table>

146. (a) Under IFRS, the cost and revaluation models can be used.

147. (d) IFRS does not set a timeframe for revaluations.

148. (c) The revaluation surplus should be recognized as a part of other comprehensive income.

149. (a) The changes in fair value should be reported on the profit and loss statement.

150. (b) The cost and revaluation models are used for both intangible assets and property, plant, and equipment.

151. (a) In year 5, Salem should recognize an impairment loss of $20,000 ($200,000-$180,000). In Year 6, it should recognize a recovery of $10,000 ($190,000 - $180,000).

152. (c) Biological assets are animals or plants and must be reported separately on the balance sheet. Answer “c” is correct because biological assets may be reported at cost or fair value.
Chapter Eleven
Solutions to Other Assets, Liabilities and Disclosures Problems

NUMBER 1

a. The appropriate valuation basis of a note receivable at the date of sale is its discounted present value of the future amounts receivable for principal and interest using the customer's market rate of interest, if known or determinable, at the date of the equipment's sale.

b. Gregor should increase the carrying amount of the note receivable by the effective interest revenue earned for the period February 1 to May 1, 20X9. Gregor should account for the discounting of the note receivable without recourse by increasing cash for the proceeds received, eliminating the carrying amount of the note receivable, and recognizing a loss (gain) for the resulting difference.

This reporting is appropriate since the note's carrying amount is correctly recorded at the date it was discounted and the discounting of a note receivable without recourse is equivalent to a sale of that note. Thus the difference between the cash received and the carrying amount of the note at the date it is discounted is reported as a loss (gain).

c. 1. For notes receivable not discounted, Gregor should recognize an uncollectible notes expense. The expense equals the adjustment required to bring the balance of the allowance for uncollectible notes receivable equal to the estimated uncollectible amounts less the fair values of recoverable equipment.

2. For notes receivable discounted with recourse, Gregor should recognize an uncollectible notes expense. The expense equals the estimated amounts payable for customers' defaults less the fair values of recoverable equipment.

NUMBER 2

a. 1. When the old engines’ costs are known, the snowmobiles account is decreased by the old engines’ costs, and accumulated depreciation is decreased by the accumulated depreciation on the old engines. A current asset would be recorded for the fair value of the future repair and maintenance services. The net difference between the old engines’ carrying amounts and their fair values is recorded as an operating gain or loss. To record the new engines’ acquisition, both the snowmobiles account and accounts payable are increased by the new engines’ costs.

2. If the old engines' costs are unknown then either the snowmobiles account would be increased or accumulated depreciation would be decreased by the difference between the new engines’ costs and the old engines’ fair values.

b. 1. Assumptions underlying use of an accelerated depreciation method include:
   • An asset is more productive in the earlier years of its estimated useful life. Therefore, greater depreciation charges in the earlier years would be matched against the greater revenues generated in the earlier years.
   • Repair and maintenance costs are often higher in later periods and an accelerated depreciation method results in a more nearly annual constant total cost over the years of use.
   • An asset may become obsolete before the end of its originally estimated useful life. The risk associated with estimated long-term cash flows is greater than the risk associated with near-term cash flows. Accelerated depreciation recognizes this condition.
2. Winter should calculate snowmobile depreciation by applying twice the straight-line rate to their carrying amounts.

c. Under the inventory (appraisal) method, Winter calculates the ending undepreciated cost on the skis, poles, and boots by multiplying the physical quantities of these items on hand by an appraised amount. This ending undepreciated cost is classified as a noncurrent asset. Depreciation included in continuing operations equals the sum of the beginning balance and purchases for the year less the ending undepreciated cost.

**NUMBER 3**

61. (C) All necessary cost to purchase the inventory and get it ready to sell should be capitalized. Freight cost are cost of purchasing the inventory and should be capitalized.

62. (C) The purchaser has the responsibility for paying the freight and insurance on merchandise shipped F.O.B. shipping point. Since the insurance on goods in transit is a cost of buying the inventory, it should be capitalized.

63. (E) Interest is never capitalized on inventory produced in the normal course of business. Interest may be capitalized on an internally constructed assets or assets produced as discrete products for sale.

64. (C) All necessary cost to purchase equipment and get it ready for use should be capitalized. Installation cost would be a necessary cost to get the machine ready for use and should be capitalized.

65. (C) Testing of newly-purchased equipment should be capitalized because it is a necessary cost of getting the asset ready for use.

66. (E) Routine costs such as the current year service contract on equipment do not benefit the company beyond the current year and should not be capitalized.

67. $600,000. The total cost of the office building and the land is $1,000,000 ($800,000 cash paid plus the $200,000 mortgage assumed). The portion of the cost allocated to the building is $600,000 (60% * the total cost of $1,000,000).

68. $503,000. The problem states that this is a capital lease. The amount capitalized should be the annual payment times the present value factor for seven periods at 9% ($100,000 * 5.03 = $503,000).

69. Since the transaction lacks commercial substance and includes a theoretical gain, the gain should be deferred and the “cost” of the new asset should be the book value of the assets given up which are the land of $320,000 plus the cash of $50,000 for a total of $370,000. The theoretical gain is the fair value of the land $450,000—the book value of $320,000 for a total gain of $130,000.
70. Since the transaction lacks commercial substance and Club Co. received cash (boot), a gain should be recognized on the portion of the asset sold and the “cost” of the new asset should be recorded at the book value of the portion of the asset traded.

\[
\text{PORTION SOLD} = \frac{\text{Boot} \times \text{Carrying Value Traded}}{\text{Boot} - \text{FMV of Asset Received}}
\]

\[
= \frac{50,000}{50,000 + 450,000} \times \frac{1}{10} \times 350,000 = \$35,000
\]

\[
\text{PORTION TRADED} = \frac{9}{10} \times 350,000 = \$315,000
\]

which becomes the "cost" of the land received.

71. $90,000. The straight-line depreciation per year is the cost - salvage value divided by the useful life:

\[
\frac{864,000 - 144,000}{8\text{ years}} = \$90,000\text{ per year}
\]

72. $162,000. The double-declining balance depreciation expense is calculated by multiplying a constant rate times the declining book value. The salvage value is ignored initially and the constant rate is twice the straight rate. In this case, the straight line rate is 1/8 per year and the DDB rate would be 2 \times 1/8 or 2/8 or 25%. Therefore, depreciation expense would be as follows:

\[
\begin{align*}
\text{20X6} & \quad 25\% \times \$864,000 = \$216,000 \\
\text{20X7} & \quad 25\% \times (\$864,000 - 216,000) = \$162,000
\end{align*}
\]

73. $140,000. SYD depreciation is calculated by taking a declining fraction and multiplying it times a constant depreciation base. The depreciation base is the cost minus the salvage value ($864,000 - 144,000 = \$720,000$). The denominator for the fraction is the sum of all the numbers in the sequence one through eight or the formula \(n(n+1)/2\) which is \(8(8+1)/2 = 36\). The numerator for the first year is the highest number in the sequence (8) and for the second year the next highest number (7). Therefore:

\[
\begin{align*}
\text{20X6} & \quad \frac{8}{36} \times \$720,000 = \$160,000 \\
\text{20X7} & \quad \frac{7}{36} \times \$720,000 = \$140,000
\end{align*}
\]

74. $120,000. The units-of-production calculates a depreciation cost per unit of production:

\[
\text{Depreciation per unit of Production} = \frac{\text{Cost} - \text{Salvage Value}}{\text{ESTIMATED PRODUCTION}}
\]

\[
= \frac{\$864,000 - 144,000}{1800,000 \text{ units}} = \$0.40 \text{ per unit}
\]

\[
\begin{align*}
\text{2000 Depreciation} & \quad = \text{Depreciation per unit} \times \text{units produced in 2000} \\
& \quad = \$0.40 \times 300,000 \text{ units} = \$120,000
\end{align*}
\]
NUMBER 4

a.

Schedule 1

_Nan Co._

ANALYSIS OF CHANGES IN PROPERTY, PLANT, AND EQUIPMENT

_For the Year Ended December 31, 20X5_

<table>
<thead>
<tr>
<th></th>
<th>Balance 12/31/X4</th>
<th>Increase</th>
<th>Decrease</th>
<th>Balance 12/31/X5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$ 275,000</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 275,000</td>
</tr>
<tr>
<td>Buildings</td>
<td>2,800,000</td>
<td>1,875,000</td>
<td>4,675,000</td>
<td></td>
</tr>
<tr>
<td>Machinery &amp; equipment</td>
<td>1,380,000</td>
<td>369,000</td>
<td>17,000</td>
<td>1,732,000</td>
</tr>
<tr>
<td>Automobiles and trucks</td>
<td>210,000</td>
<td>25,000</td>
<td>48,000</td>
<td>187,000</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>432,000</td>
<td>—</td>
<td>—</td>
<td>432,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$5,097,000</td>
<td>$2,269,000</td>
<td>$65,000</td>
<td>$7,301,000</td>
</tr>
</tbody>
</table>

_Explanations of amounts:_

[1] Construction cost of building
   - Direct costs $1,095,000
   - Overhead costs
     - Fixed (15,000 hours × $25) $375,000
     - Variable (15,000 hours × $27) 405,000
   - Total $1,875,000

[2] Machinery and equipment purchased
   - Invoice cost $325,000
   - Installation cost (concrete embedding) 18,000
   - Cost of gaining access to factory ($19,000 + $7,000) 26,000
   - Total acquisition cost $369,000

b. 1.

_Nan Co._

SCHEDULE OF DEPRECIATION AND AMORTIZATION EXPENSE

_For the Year Ended December 31, 20X5_

Buildings
- Carrying amount, 1/1/X5 ($2,800,000 – $672,900) $2,127,100
- Building completed 1/6/X5 1,875,000
- Total subject to depreciation 4,002,100
- 150% declining balance [(100% ÷ 25) × 1.5] × 6%
- Depreciation for 20X5 $240,126

Machinery and equipment
- Balance, 1/1/X5 $1,380,000
- Straight-line (100% ÷ 10) × 10% $138,000
- Purchased 7/1/X5 369,000
- Straight-line (10% × 6/12) × 5% 18,450
- Depreciation for 20X5 $156,450
Automobiles and trucks
Carrying amount, 1/1/X5 ($210,000 – $114,326) $95,674
Deduct carrying amount, 1/1/X5 on truck sold 9/30/X5 30,000
Amount subject to depreciation 65,674
150% declining balance [(100% ÷ 5) × 1.5] × 30% $19,702
Automobile purchased 8/30/X5 25,000
150% declining balance (30% × 4/12) × 10% 2,500
Truck sold 9/30/X5—depreciation for 20X5
(1/1 to 9/30/X5) ($30,000 × 30% × 9/12) 6,750
Depreciation for 20X5 $28,952

Leasehold improvements
Amortization for 20X5 ($432,000 ÷ 12 years) $36,000

b. 2.

Schedule 2

Nan Co.
ANALYSIS OF CHANGES IN ACCUMULATED DEPRECIATION AND AMORTIZATION
For the Year Ended December 31, 20X5

<table>
<thead>
<tr>
<th></th>
<th>Balance 12/31/X4</th>
<th>Increase</th>
<th>Decrease</th>
<th>Balance 12/31/X5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings</td>
<td>$672,900</td>
<td>$240,126</td>
<td>$—</td>
<td>$913,026</td>
</tr>
<tr>
<td>Machinery &amp; equipment</td>
<td>367,500</td>
<td>156,450</td>
<td>14,025 [1]</td>
<td>509,925</td>
</tr>
<tr>
<td>Automobiles and trucks</td>
<td>114,326</td>
<td>28,952</td>
<td>24,750 [2]</td>
<td>118,528</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>108,000</td>
<td>36,000</td>
<td>$—</td>
<td>144,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$1,262,726</td>
<td>$461,528</td>
<td>$38,775</td>
<td>$1,685,479</td>
</tr>
</tbody>
</table>

\[
\begin{array}{|l|cc|}
\hline
& 11 & 21 \\
\hline
\text{Cost} & $17,000 & $48,000 \\
\text{Carrying Amount} & 2,975 & 23,250 * \\
\text{Accumulated Depreciation} & $14,025 & $24,750 \\
\hline
\end{array}
\]

*(30,000 - 6,750)

c.

Nan Co.
GAIN ON DISPOSITION OF PROPERTY, PLANT, AND EQUIPMENT
For the Year Ended December 31, 20X5

<table>
<thead>
<tr>
<th>Selling price</th>
<th>Carrying amount</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale of truck</td>
<td>$23,500</td>
<td>$23,250</td>
</tr>
<tr>
<td>Machine exchanged for debt</td>
<td>4,000</td>
<td>2,975</td>
</tr>
<tr>
<td>$27,500</td>
<td>$26,225</td>
<td>$1,275</td>
</tr>
</tbody>
</table>

11S-23
**NUMBER 5**

a.  
*Kern, Inc.*

**LONG-TERM RECEIVABLES SECTION OF BALANCE SHEET**  
*December 31, 20X7*

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>9% note receivable from sale of idle building, due in annual installments of</td>
<td>$250,000</td>
</tr>
<tr>
<td>$250,000 to May 1, 20X9, less current installment</td>
<td></td>
</tr>
<tr>
<td>8% note receivable from officer, due December 31, 1999, collateralized by</td>
<td>$200,000</td>
</tr>
<tr>
<td>5,000 shares of Kern, Inc., common stock with a fair value of $225,000</td>
<td></td>
</tr>
<tr>
<td>Noninterest bearing note from sale of patent, net of 10% imputed interest,</td>
<td>$88,795</td>
</tr>
<tr>
<td>due April 1, 20X9</td>
<td></td>
</tr>
<tr>
<td>Installment contract receivable, due in annual installments of $88,332 on</td>
<td>$219,668</td>
</tr>
<tr>
<td>July 1 for each of the next four years less the current installment</td>
<td></td>
</tr>
<tr>
<td>Total long-term receivables</td>
<td>$758,463</td>
</tr>
</tbody>
</table>

b.  

*Kern, Inc.*

**SELECTED BALANCE SHEET ACCOUNTS**  
*December 31, 20X7*

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current portion of long-term receivables:</td>
<td></td>
</tr>
<tr>
<td>Note receivable from sale of idle building</td>
<td>$250,000</td>
</tr>
<tr>
<td>Installment contract receivable</td>
<td>60,332</td>
</tr>
<tr>
<td>Total</td>
<td>$310,332</td>
</tr>
<tr>
<td>Accrued interest receivable:</td>
<td></td>
</tr>
<tr>
<td>Note receivable from sale of idle building</td>
<td>$30,000</td>
</tr>
<tr>
<td>Installment contract receivable</td>
<td>14,000</td>
</tr>
<tr>
<td>Total</td>
<td>$44,000</td>
</tr>
</tbody>
</table>

c.  

*Kern, Inc.*

**INTEREST REVENUE FROM LONG-TERM RECEIVABLES**  
**AND GAINS RECOGNIZED ON SALE OF ASSETS**  
*For the year ended December 31, 20X7*

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest revenue:</td>
<td></td>
</tr>
<tr>
<td>Note receivable from sale of idle building</td>
<td>$52,500</td>
</tr>
<tr>
<td>Note receivable from sale of patent</td>
<td>6,195</td>
</tr>
<tr>
<td>Note receivable from officer</td>
<td>16,000</td>
</tr>
<tr>
<td>Installment contract receivable from sale of land</td>
<td>14,000</td>
</tr>
<tr>
<td>Total interest revenue</td>
<td>$88,695</td>
</tr>
<tr>
<td>Gains recognized on sale of assets:</td>
<td></td>
</tr>
<tr>
<td>Patent</td>
<td>$ 44,600</td>
</tr>
<tr>
<td>Land</td>
<td>100,000</td>
</tr>
<tr>
<td>Total gains recognized</td>
<td>$144,600</td>
</tr>
</tbody>
</table>
Explanation of amounts:

[1] Long-term portion of 9% note receivable at 12/31/X7
   Face amount, 5/1/X6 $750,000
   Less installment received 5/1/X7 250,000
   Balance, 12/31/X7 500,000
   Less installment due 5/1/X8 250,000
   Long-term portion, 12/31/X7 $250,000

[2] Noninterest bearing note, net of imputed interest at 12/31/X7
   Face amount, 4/1/X7 $100,000
   Less imputed interest [$100,000 – $82,600 ($100,000 × 0.826)] 17,400
   Balance, 4/1/X7 82,600
   Add interest earned to 12/31/X7 [$82,600 × 10% × 9/12] 6,195
   Balance, 12/31/X7 $88,795

[3] Long-term portion of installment contract receivable at 12/31/X7
   Contract selling price, 7/1/X7 $400,000
   Less cash down payment 120,000
   Balance, 12/31/X7 280,000
   Less installment due 7/1/X8 [$88,332 – $28,000 ($280,000 × 10%)] 60,332
   Long-term portion, 12/31/X7 $219,668

[4] Accrued interest—note receivable, sale of idle building at 12/31/X7
   Interest accrued from 5/1 to 12/31/X7 [$500,000 × 9% × 8/12] $30,000

[5] Accrued interest—installment contract at 12/31/X7
   Interest accrued from 7/1 to 12/31/X7 [$280,000 × 10% × ½] $14,000

[6] Interest revenue—note receivable, sale of idle building, for 20X7
   Interest earned from 1/1 to 5/1/X7 [$750,000 × 9% × 4/12] $22,500
   Interest earned from 5/1 to 12/31/X7 [$500,000 × 9% × 8/12] 30,000
   Interest revenue $52,500

[7] Interest revenue—note receivable, officer, for 20X7
   Interest earned 1/1 to 12/31/X7 [$200,000 × 8%] $16,000

[8] Gain recognized on sale of patent
   Stated selling price $100,000
   Less imputed interest 17,400 [2]
   Actual selling price 82,600
   Less cost of patent (net)
      Carrying value 1/1/X7 $40,000
      Less amortization 1/1 to 4/1/X7 [$8,000 × ¼] 2,000 38,000
   Gain recognized $44,600

[9] Gain recognized on sale of land
   Selling price $400,000
   Less cost 300,000
   Gain recognized $100,000
NUMBER 6

Pitt Company
INCOME BEFORE INCOME TAXES ON SALE OF PATENT
For the Years Ended December 31, 20X7, and 20X8

<table>
<thead>
<tr>
<th></th>
<th>20X7</th>
<th>20X8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit on Sale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales price ($16,000 × 3.60)</td>
<td>$57,600</td>
<td></td>
</tr>
<tr>
<td>Cost of patent, net of amortization</td>
<td>10,000</td>
<td>$47,600</td>
</tr>
<tr>
<td>Interest income (Schedules 1 and 2)</td>
<td>6,912</td>
<td>$5,821</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>$54,512</td>
<td>$5,821</td>
</tr>
</tbody>
</table>

Schedule 1—Computation of Interest Income for 20X7

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales price</td>
<td>$57,600</td>
</tr>
<tr>
<td>Interest rate</td>
<td>× 12%</td>
</tr>
<tr>
<td>Interest income</td>
<td>$6,912</td>
</tr>
</tbody>
</table>

Schedule 2—Computation of Interest Income for 20X8

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at December 31, 20X7 ($57,600 + $6,912)</td>
<td>$64,512</td>
</tr>
<tr>
<td>Deduct payment made on January 1, 20X8</td>
<td>16,000</td>
</tr>
<tr>
<td></td>
<td>48,512</td>
</tr>
<tr>
<td>Interest rate</td>
<td>× 12%</td>
</tr>
<tr>
<td>Interest income</td>
<td>$5,821</td>
</tr>
</tbody>
</table>

NUMBER 7

a. Portland should have selected the straight-line depreciation method when approximately the same amount of an asset’s service potential is used up each period. If the reasons for the decline in service potential are unclear, then the selection of the straight-line method could be influenced by the ease of recordkeeping, its use for similar assets, and its use by others in the industry.

b. Portland should record depreciation expense to the date of the exchange. If the original truck’s carrying amount is greater than its fair value, a loss results. The truck’s capitalized cost and accumulated depreciation are eliminated, and the loss on trade-in is reported as part of income from continuing operations. The newly acquired truck is recorded at fair value. If the original truck’s carrying amount is less than its fair value at trade-in, then there is an unrecognized gain. The newly acquired truck is recorded at fair value less the unrecognized gain. Cash is decreased by the amount paid.

c. 1. By associating depreciation with a group of machines instead of each individual machine, Portland’s bookkeeping process is greatly simplified. Also, since actual machine lives vary from the average depreciable life, unrecognized net losses on early dispositions are expected to be offset by continuing depreciation on machines usable beyond the average depreciable life. Periodic income does not fluctuate as a result of recognizing gains and losses on manufacturing machine dispositions.

2. Portland should divide the depreciable cost (capitalized cost less residual value) of each machine by its estimated life to obtain its annual depreciation. The sum of the individual annual depreciation amounts should then be divided by the sum of the individual capitalized costs to obtain the annual composite depreciation rate.
NUMBER 8

1. Land - The purchase price of the land is capitalized as a part of the cost of the land. Land is a permanent asset and is not depreciated.

2. Expense - Interest incurred after completion of the building is charged to interest expense.

3. Building - Interest incurred during construction is capitalized as a part of the cost of the building and depreciated. The theory is that the building is not yet generating revenue and to charge the interest to expense will result in an improper matching of expenses and revenue.

4. Land - All costs associated with the purchase of the land and getting the land ready for its intended use should be capitalized. Since the land was purchased as a building site, the cost of the building which will be razed is considered a part of the land.

5. Land - The real estate taxes paid are a necessary cost associated with the purchase of the land.

6. Building - Liability insurance during construction is a normal cost of the construction and should be capitalized as a part of the cost of the building and depreciated.

7. Land - The cost of tearing down the building is a necessary cost of getting the land ready for its intended use and should be capitalized as a part of the cost of the land.

8. Expense - Moving costs are not acquisition cost or cost of getting the land ready for its intended use or normal cost of construction. Therefore, the costs should be charged to expense of the period.
Chapter 11 Simulation Exercises

NUMBER 1
This problem consists of Sections A and B

A:
Sigma Co. began operations on January 1, 20X7. On December 31, 20X7, Sigma provided for uncollectible accounts based on 1% of annual credit sales. On January 1, 20X8, Sigma changed its method of determining its allowance for uncollectible accounts by applying certain percentages to the accounts receivable aging as follows:

<table>
<thead>
<tr>
<th>Days past invoice date</th>
<th>Percent deemed to be uncollectible</th>
</tr>
</thead>
<tbody>
<tr>
<td>0– 30</td>
<td>1</td>
</tr>
<tr>
<td>31– 90</td>
<td>5</td>
</tr>
<tr>
<td>91–180</td>
<td>20</td>
</tr>
<tr>
<td>Over 180</td>
<td>80</td>
</tr>
</tbody>
</table>

In addition, Sigma wrote off all accounts receivable that were over one year old. The following additional information relates to the years ended December 31, 20X8, and 20X7:

<table>
<thead>
<tr>
<th></th>
<th>20X8</th>
<th>20X7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit sales</td>
<td>$3,000,000</td>
<td>$2,800,000</td>
</tr>
<tr>
<td>Collections</td>
<td>2,915,000</td>
<td>2,400,000</td>
</tr>
<tr>
<td>Accounts written off</td>
<td>27,000</td>
<td>None</td>
</tr>
<tr>
<td>Recovery of accounts previously written off</td>
<td>7,000</td>
<td>None</td>
</tr>
</tbody>
</table>

Days past invoice date at 12/31

<table>
<thead>
<tr>
<th>Days past invoice date</th>
<th>20X8</th>
<th>20X7</th>
</tr>
</thead>
<tbody>
<tr>
<td>0– 30</td>
<td>300,000</td>
<td>250,000</td>
</tr>
<tr>
<td>31– 90</td>
<td>80,000</td>
<td>90,000</td>
</tr>
<tr>
<td>91–180</td>
<td>60,000</td>
<td>45,000</td>
</tr>
<tr>
<td>Over 180</td>
<td>25,000</td>
<td>15,000</td>
</tr>
</tbody>
</table>

Required:

a. Prepare a schedule showing the calculation of the allowance for uncollectible accounts at December 31, 20X8.
b. Prepare a schedule showing the computation of the provision for uncollectible accounts for the year ended December 31, 20X8.

B:
Magrath Company has an operating cycle of less than one year and provides credit terms for all of its customers.

On July 1, 20X6, Magrath sold special order merchandise and received a noninterest-bearing note due June 30, 20X8. The market rate of interest for this note is determinable.

Magrath uses the allowance method to account for uncollectible accounts. During 20X6, some accounts were written off as uncollectible and other accounts previously written off as uncollectible were collected.

Required:

a. How should Magrath report the effects of the noninterest-bearing note on its income statement for the year ended December 31, 20X6, and its December 31, 20X6, balance sheet?
b. How should Magrath account for the collection of the accounts previously written off as uncollectible?
c. What are the two basic approaches to estimating uncollectible accounts under the allowance method? What is the rationale for each approach?
NUMBER 2
Sigma Co. began operations on January 1, 20X7. On December 31, 20X7, Sigma provided for uncollectible accounts based on 1% of annual credit sales. On January 1, 20X8, Sigma changed its method of determining its allowance for uncollectible accounts by applying certain percentages to the accounts receivable aging as follows:

<table>
<thead>
<tr>
<th>Days past invoice date</th>
<th>Percent deemed to be uncollectible</th>
</tr>
</thead>
<tbody>
<tr>
<td>0– 30</td>
<td>1</td>
</tr>
<tr>
<td>31– 90</td>
<td>5</td>
</tr>
<tr>
<td>91–180</td>
<td>20</td>
</tr>
<tr>
<td>Over 180</td>
<td>80</td>
</tr>
</tbody>
</table>

In addition, Sigma wrote off all accounts receivable that were over one year old. The following additional information relates to the years ended December 31, 20X8, and 20X7:

<table>
<thead>
<tr>
<th></th>
<th>20X8</th>
<th>20X7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit sales</td>
<td>$3,000,000</td>
<td>$2,800,000</td>
</tr>
<tr>
<td>Collections</td>
<td>2,915,000</td>
<td>2,400,000</td>
</tr>
<tr>
<td>Accounts written off</td>
<td>27,000</td>
<td>None</td>
</tr>
<tr>
<td>Recovery of accounts previously written off</td>
<td>7,000</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Days past invoice date at 12/31</th>
<th>20X8</th>
<th>20X7</th>
</tr>
</thead>
<tbody>
<tr>
<td>0– 30</td>
<td>300,000</td>
<td>250,000</td>
</tr>
<tr>
<td>31– 90</td>
<td>80,000</td>
<td>90,000</td>
</tr>
<tr>
<td>91–180</td>
<td>60,000</td>
<td>45,000</td>
</tr>
<tr>
<td>Over 180</td>
<td>25,000</td>
<td>15,000</td>
</tr>
</tbody>
</table>

Required:

a. Prepare a schedule showing the calculation of the allowance for uncollectible accounts at December 31, 20X8.

b. Prepare a schedule showing the computation of the provision for uncollectible accounts for the year ended December 31, 20X8.

NUMBER 3
Magrath Company has an operating cycle of less than one year and provides credit terms for all of its customers. On April 1, 20X6, the company factored, without recourse, some of its accounts receivable.

On July 1, 20X6, Magrath sold special order merchandise and received a noninterest-bearing note due June 30, 20X8. The market rate of interest for this note is determinable.

Magrath uses the allowance method to account for uncollectible accounts. During 20X6, some accounts were written off as uncollectible and other accounts previously written off as uncollectible were collected.

Required:

a. How should Magrath account for and report the accounts receivable factored on April 1, 20X6? Why is this accounting treatment appropriate?

b. How should Magrath report the effects of the noninterest-bearing note on its income statement for the year ended December 31, 20X6, and its December 31, 20X6, balance sheet?

c. How should Magrath account for the collection of the accounts previously written off as uncollectible?

d. What are the two basic approaches to estimating uncollectible accounts under the allowance method? What is the rationale for each approach?
Chapter 11 Simulation Solutions

NUMBER 1
This solution consists of Sections A and B

A:

a. Sigma Co.

SCHEDULE OF CALCULATION OF
ALLOWANCE FOR UNCOLLECTIBLE ACCOUNTS
December 31, 20X8

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>Percentage</th>
<th>Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 30 days</td>
<td>$300,000</td>
<td>1%</td>
<td>$3,000</td>
</tr>
<tr>
<td>31 to 90 days</td>
<td>80,000</td>
<td>5%</td>
<td>4,000</td>
</tr>
<tr>
<td>91 to 180 days</td>
<td>60,000</td>
<td>20%</td>
<td>12,000</td>
</tr>
<tr>
<td>Over 180 days</td>
<td>25,000</td>
<td>80%</td>
<td>20,000</td>
</tr>
</tbody>
</table>

Accounts receivable $465,000
Allowance for uncollectible accounts $39,000

b. Computation of 20X8 provision:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, December 31, 20X7</td>
<td>$28,000</td>
</tr>
<tr>
<td>Writeoffs during 20X8</td>
<td>(27,000)</td>
</tr>
<tr>
<td>Recoveries during 20X8</td>
<td>7,000</td>
</tr>
<tr>
<td>Balance before 20X8 provision</td>
<td>8,000</td>
</tr>
<tr>
<td>Required allowance at December 31, 20X8</td>
<td>39,000</td>
</tr>
<tr>
<td>20X8 provision</td>
<td>$31,000</td>
</tr>
</tbody>
</table>

B:

a. The carrying amount of the note at July 1, 20X6, is the maturity amount discounted for two years at the market interest rate. For the noninterest-bearing note receivable, the interest revenue for 20X6 should be determined by multiplying the carrying amount of the note at July 1, 20X6, times the market rate of interest at the date of the note times one-half.

The noninterest-bearing note receivable should be reported in the December 31, 20X6, balance sheet, as a noncurrent asset at its face amount less the unamortized discount.

b. Magrath should account for the collection of the accounts previously written off as uncollectible as follows:
* Increase both accounts receivable and the allowance for uncollectible accounts.
* Increase cash and decrease accounts receivable.

c. One approach estimates uncollectible accounts based on credit sales. This approach focuses on income determination by attempting to match uncollectible accounts expense with the revenues generated.

The other allowance approach estimates uncollectible accounts based on the balance in or aging of receivables. The approach focuses on asset valuation by attempting to report receivables at realizable value.
NUMBER 2

a.

*Sigma Co.*

**SCHEDULE OF CALCULATION OF ALLOWANCE FOR UNCOLLECTIBLE ACCOUNTS**

*December 31, 20X8*

<table>
<thead>
<tr>
<th>Days</th>
<th>Amount</th>
<th>%</th>
<th>Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 30 days</td>
<td>$300,000</td>
<td>1%</td>
<td>$3,000</td>
</tr>
<tr>
<td>31 to 90 days</td>
<td>80,000</td>
<td>5%</td>
<td>4,000</td>
</tr>
<tr>
<td>91 to 180 days</td>
<td>60,000</td>
<td>20%</td>
<td>12,000</td>
</tr>
<tr>
<td>Over 180 days</td>
<td>25,000</td>
<td>80%</td>
<td>20,000</td>
</tr>
</tbody>
</table>

Accounts receivable $465,000
Allowance for uncollectible accounts $39,000

b. Computation of 20X8 provision:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, December 31, 20X7</td>
<td>$28,000</td>
</tr>
<tr>
<td>Writeoffs during 20X8</td>
<td>(27,000)</td>
</tr>
<tr>
<td>Recoveries during 20X8</td>
<td>7,000</td>
</tr>
<tr>
<td>Balance before 20X8 provision</td>
<td>8,000</td>
</tr>
<tr>
<td>Required allowance at December 31, 20X8</td>
<td>39,000</td>
</tr>
<tr>
<td>20X8 provision</td>
<td>$31,000</td>
</tr>
</tbody>
</table>

NUMBER 3

a. To account for the accounts receivable factored on April 1, 20X6, Magrath should decrease accounts receivable by the amount of accounts receivable factored, increase cash by the amount received from the factor, and record a loss equal to the difference. The loss should be reported in the income statement. Factoring of accounts receivable on a without recourse basis is equivalent to a sale.

b. The carrying amount of the note at July 1, 20X6, is the maturity amount discounted for two years at the market interest rate. For the noninterest-bearing note receivable, the interest revenue for 20X6 should be determined by multiplying the carrying amount of the note at July 1, 20X6, times the market rate of interest at the date of the note times one-half.

The noninterest-bearing note receivable should be reported in the December 31, 20X6, balance sheet, as a noncurrent asset at its face amount less the unamortized discount.

c. Magrath should account for the collection of the accounts previously written off as uncollectible as follows:
   * Increase both accounts receivable and the allowance for uncollectible accounts.
   * Increase cash and decrease accounts receivable.

d. One approach estimates uncollectible accounts based on credit sales. This approach focuses on income determination by attempting to match uncollectible accounts expense with the revenues generated.

The other allowance approach estimates uncollectible accounts based on the balance in or aging of receivables. The approach focuses on asset valuation by attempting to report receivables at realizable value.
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Reporting the Results of Operations
Accounting Codification Standard

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Reporting the Results of Operations

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INCOME STATEMENT- MULTI-STEP FORMAT
This approach is called multi-step because of the number of “steps” or sub-totals between the beginning net sales number and the calculation of income from continuing operations. Examples of the “steps” are the calculation of gross profit, operating profit, and income from continuing operations before income taxes.

Complex Corporation
Income Statement & Statement of Retained Earnings
For the Years Ended December 31,
(in thousands)

<table>
<thead>
<tr>
<th>Description</th>
<th>20X7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>$5,000</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>2,800</td>
</tr>
<tr>
<td><strong>GROSS PROFIT</strong></td>
<td>2,200</td>
</tr>
<tr>
<td><strong>Operating expenses</strong></td>
<td></td>
</tr>
<tr>
<td>Selling expenses</td>
<td>800</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>600</td>
</tr>
<tr>
<td>Depreciation Expense*</td>
<td>200</td>
</tr>
<tr>
<td>Total Operating Expenses</td>
<td>1,600</td>
</tr>
<tr>
<td><strong>OPERATING PROFIT</strong></td>
<td>600</td>
</tr>
<tr>
<td>Other income, principally interest</td>
<td>(80)</td>
</tr>
<tr>
<td>Other expenses, principally interest</td>
<td>20</td>
</tr>
<tr>
<td>Income from continuing operations before income taxes</td>
<td>660</td>
</tr>
<tr>
<td>Provision for income taxes</td>
<td>200</td>
</tr>
<tr>
<td><strong>INCOME FROM CONTINUING OPERATIONS</strong></td>
<td>$460</td>
</tr>
<tr>
<td>Discontinued operations:</td>
<td></td>
</tr>
<tr>
<td>Loss from operations of discontinued widget</td>
<td></td>
</tr>
<tr>
<td>Component including a loss on disposal</td>
<td></td>
</tr>
<tr>
<td>Of $350 and net of taxes of $90</td>
<td>(210)</td>
</tr>
<tr>
<td><strong>NET INCOME BEFORE EXTRAORDINARY GAIN</strong></td>
<td>$250</td>
</tr>
<tr>
<td>Extraordinary gain from settlement with</td>
<td></td>
</tr>
<tr>
<td>State for condemnation of property</td>
<td></td>
</tr>
<tr>
<td>Net of income taxes of $30</td>
<td>70</td>
</tr>
<tr>
<td><strong>NET INCOME</strong></td>
<td>$320</td>
</tr>
<tr>
<td>Retained Earnings Balance January 1 as reported</td>
<td>$1,500</td>
</tr>
<tr>
<td>Less Error in prior periods on warranty accrual</td>
<td>(35)</td>
</tr>
<tr>
<td>Plus Cumulative effect of a change from weighted-average to FIFO inventory method net of income taxes of $24</td>
<td>56</td>
</tr>
<tr>
<td>Retained Earnings Balance January 1 as adjusted</td>
<td>1,521</td>
</tr>
<tr>
<td><strong>LESS Cash dividends</strong></td>
<td>$40</td>
</tr>
<tr>
<td>Stock dividends</td>
<td>60</td>
</tr>
<tr>
<td><strong>Retained Earnings Balance December 31</strong></td>
<td>$1741</td>
</tr>
</tbody>
</table>

Earnings per common share (100,000 shares):
Income from continuing operations $4.60
Loss from discontinued widget division (2.10)
Income before extraordinary gain 2.50
Extraordinary gain net of income taxes .70
Net income $3.20

*Complex Corp as of January 1, 20X7, changed its method of recording depreciation from the double-declining balance method to the straight-line method. In accordance with ASC 250, the change in accounting principle was not applied retroactively but was applied prospectively. As a result, the depreciation expense on the current statement is calculated using the straight-line method and previous year’s calculation are done on the DDB method. If the DDB method had been used for 20X7, the depreciation expense would have been $220,000.

INCOME STATEMENT- SINGLE STEP FORMAT
A single-step approach lists all revenues together and then lists all expenses together regardless of the source. The approach is called single-step because a single calculation of total revenues less total expenses equals income from continuing operations. A single-step income statement would differ from a multi-step income statement only in the calculation of income from continuing operations as shown below. The calculation of discontinued operations, extraordinary items, earnings per share, etc. would be the same under both the single-step and the multi-step method.

Complex Corporation
Partial Income Statement
For the Years Ended December 31,
(in thousands)

<table>
<thead>
<tr>
<th>Single-Step Format</th>
<th>20X7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUES</strong></td>
<td></td>
</tr>
<tr>
<td>Net sales</td>
<td>$5,000</td>
</tr>
<tr>
<td>Other Income – Principally Interest</td>
<td>80</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>$5,080</td>
</tr>
</tbody>
</table>

| **EXPENSES**                        |      |
| Cost of Sales                       | $2,800 |
| Selling Expenses                    | 800  |
| Administration Expenses             | 600  |
| Depreciation Expense                | 200  |
| Other Expenses – Principally Interest| 20   |
| Provision for Income Taxes          | 200  |
| Total Expenses                      | 4,620 |

Income from Continuing Operations $460
APPENDIX A — TYPES OF ACCOUNTING CHANGES

CHANGE IN ACCOUNTING ESTIMATE

DEFINITION:
A change in estimate based on new information

EXAMPLES:
a. Change the useful life of an asset
b. Change the percentage used in estimating uncollectible accounts
c. Change in estimated warranty Expense

ACCOUNTING: Adjust current and future years to reflect the change in accounting estimate (prospective approach) DO NOT ADJUST PREVIOUS YEARS

CHANGE IN ACCOUNTING ENTITY

DEFINITION:
A change in the composition of the reporting entity

EXAMPLES:
a. A change from nonconsolidated statements to consolidated statements
b. Consolidating a different number of subsidiaries this year vs. last year

c. A change from LIFO to FIFO inventory method
b. A change in the method of reporting long-term contracts
c. A change in depreciation methods
d. A change from the installment method of reporting sales to the accrual method

ACCOUNTING: a. Adjust all previous years retroactively.
b. Restate the previous income statements and adjust beginning retained earnings

CHANGE IN ACCOUNTING PRINCIPLE

DEFINITION:
A. A change from one GAAP to another GAAP
B. Justify the change

EXAMPLES:
a. A change from LIFO to FIFO inventory method
b. A change in the method of reporting long-term contracts
c. A change in depreciation methods
d. A change from the installment method of reporting sales to the accrual method

ACCOUNTING: I. NORMAL ACCOUNTING CHANGE

a. Adjust all previous years retroactively.
b. Restate the previous income statements and adjust beginning retained earnings

II. EXCEPTIONS TO NORMAL ACCOUNTING CHANGES

a. Impracticability exception
   The new accounting principle should be applied at the beginning of the earliest period for which retroactive application is possible with a corresponding adjustment to beginning retained earnings.
b. Change in the method for depreciation, amortization, and depletion
   The change in principle shall be recorded as a change in accounting estimate.
ACCOUNTING CHANGES –
ASC 250, ACCOUNTING CHANGES AND ERROR CORRECTIONS

In General

This statement defines various types of changes and the manner of reporting each type. The three types of accounting changes discussed are change in accounting principle, change in accounting estimate, and change in reporting entity.

Change in Accounting Principle

APPLICATION: ASC 250 applies to all voluntary changes in accounting and to changes required by an accounting pronouncement in which the pronouncement does not include specific transition provisions. The statement applies to both for-profit and not-for-profit entities.

DEFINITION: A change in accounting principle is a change from one generally accepted accounting principle to another generally accepted principle. The firm making the change must justify the change.

EXAMPLES:
1. A change in inventory accounting methods.
2. A change in depreciation accounting methods.
3. A change in accounting for long-term construction-type contracts.

ACCOUNTING FOR A CHANGE IN ACCOUNTING PRINCIPLE: GENERAL RULE

The general rule is RETROSPECTIVE application. This means adjusting at the beginning of the first period reported the assets, liabilities and retained earnings (net of tax) for the cumulative direct effect of the new principle on all periods not reported. In addition, reported prior year statements should be restated to reflect the new accounting principle.

FOR EXAMPLE: ABC Corp., which began business five years ago, changed its inventory method from weighted average to FIFO on January 1 of year five. Since ABC reports comparative financial statements for three years, it would have to restate years four and three to report the inventory on the FIFO basis with the corresponding effects on taxes, net income and retained earnings. The cumulative effect of the change on the years not reported (years 1 & 2) would be shown as adjustments to the January 1 year 3 balances in inventory, taxes and retained earning. Year five would be reported on the FIFO method.

Exceptions To General Rule For A Change In Accounting Principle

A. IMPRACTICIBILITY EXCEPTION

1. If it is impractical to determine the cumulative effect of the change on the prior periods, the change in principle should be implemented at the beginning of the current period and continued for future periods (a prospective change)
2. If it is impractical to determine the cumulative effect of the change on ALL periods, the statement requires companies to apply the new principle at the beginning of the earliest period for which retrospective application is practicable.

B. CHANGES IN PRINCIPLE FOR DEPRECIATION, AMORTIZATION, OR DEPLETION

ASC 250 states that a change in depreciation, amortization or depletion methods is a change in principle that is inseparable from a change in accounting estimate and should be accounted for as a change in accounting estimate. For example, a change from sum-of-the-years digits method of depreciation to the straight-line method would be
accounted for as a change in accounting estimate and would affect only current and future periods. There would not be any retrospective application of the cumulative effect of the change.

**Other Point:**

The initial adoption of an accounting principle in recognition of events or transactions occurring for the first time or for items that were previously immaterial is not a change in accounting principle.

**Criteria For Determining Impracticability**

Impracticability (retrospective application is not practicable) may exist when any of the following conditions occur:

A. The entity is unable to apply the requirement after making every reasonable effort to do so.
B. Assumptions about management’s intent in prior periods can not be independently substantiated.
C. Significant estimates are required and it is not possible to obtain objective evidence:
   1. About the circumstances existing when the amounts would have been recognized, measured or disclosed AND
   2. Would have been available when the financial statements for that prior period were issued.

**Direct or Indirect Effects**

ASC 250 states that the retrospective application of the cumulative amount of the change in accounting principle should include all the direct effects of the change. Any indirect effects should be recognized and reported in the period when the change is made. Indirect effects of retrospective application may occur when a change in accounting principle causes a change in current or future cash flows from contractual obligations. An example is a change in profit-sharing payments based on a reported amount. If profit-sharing is based on reported net income and the change in accounting principle causes net income to change, the indirect effect of the change is to cause a change in profit-sharing payments.

**Disclosures for a Change in Accounting Principle**

For a change in accounting principle, the entity should disclose the nature and reason for the change and the justification for the change. Additional disclosures include the following:

a. The method of applying the change;
b. The information adjusted;
c. The effects on income from continuing operations, any other affected line items, and any affected per-share amounts;
d. The cumulative-effect adjustment; and
e. A description of indirect effects and any related per-share amounts.

If retrospective application is impossible, disclosures of the reasons for the impracticability and the method of reporting the change are required.

**Change In Accounting Estimates**

Changes in accounting estimates are an essential part of accounting and adjustments of these estimates are necessary as events occur and experience is acquired. Changes in estimates may involve:

- Uncollectible receivables
- Inventory obsolescence
- Service lives and salvage value of assets
- Warranty costs
- Periods benefited by a deferred cost
- Recoverable mineral reserves
Changes in accounting estimates should affect the period of change only or the period of change and future periods if the change affects both. No restatements of prior periods or pro forma computations are required. The effect of a change in estimate should be disclosed.

**Change In Estimate Effected By A Change In Accounting Principle**

For example, a company may change from deferring and amortizing a cost to recording it as an expense when incurred because future benefits are doubtful. Since the change in accounting principle is inseparable from the effect of the accounting estimate, this type of change should be treated as a change in accounting estimate. Therefore, only the year of change and future periods will be affected.

**Changes In The Reporting Entity**

This type of change requires the restatement of all prior periods to show financial information for the new reporting entity. Examples of such changes are:
1. Consolidated or combined statements instead of individual statements.
2. Changes among the specific subsidiaries for which consolidated statements are presented.
3. Changes the companies included in combined financial statements. Combined statements are different from consolidated statements. Examples:
   a. One individual owns a controlling interest in several corporations.
   b. The financial position and results of operations of a group of unconsolidated subsidiaries.
   c. Combined statements of companies under common management. Intercompany transactions, minority interests, etc., are treated in the same manner as in consolidated statements.

**Correction of an Error**

A correction of an error is not an accounting change and should be reported as a prior period adjustment. This requires adjustment of financial statements of the year(s) affected. Correction of errors would include:

* Mathematical mistakes
* Mistakes in the application of an accounting principle
* Oversight or misuse of information available when the financial statements were prepared.

In contrast, a change in accounting estimate results from new information, better insight or improved judgment.

A change of an accounting principle not generally accepted to one that is generally accepted is a correction of an error (changing from the direct write-off method for bad debts to the allowance method when bad debts are material).

**PRIOR PERIOD ADJUSTMENTS—ASC 250**

**Reporting Criteria**

A prior period adjustment is required for the correction of an error in the financial statements of a prior period. Items such as income tax settlements or assessments, litigation claims or settlements, proceeds from renegotiation proceedings, initiated in a prior year should be included in the determination of net income for the applicable current period as stipulated in ASC 250. Most such items will not qualify for extraordinary item treatment, but may fulfill the criteria for being either unusual or infrequent, thus requiring disclosure as a separate component of income from continuing operations.

Adjustments of prior year income tax provisions which result from income tax settlements should be reported as part of the income tax provision in the year of settlement. If such treatment causes a material distortion in the income tax provision as compared to the earnings before income taxes, an explanation as to the adjustment should be given in the footnote for income taxes.

**Disclosure and Presentation**

Items qualifying for prior period adjustment treatment will result in adjustment of the financial statements of the affected period(s) along with the related income tax effect (if appropriate) when such statements are included in the
The adjustment of net income in the affected year will result in a change in retained earnings for such year and subsequent years, including the beginning retained earnings for the current year.

When single period statements only are being presented, disclosure should be made of the effects of such restatement on the beginning retained earnings.

**Example:** A material error was made in the preparation of the income statement for the year ended 12/31/X7 is discovered when preparing the income statement for the year ended 12/31/X9:

<table>
<thead>
<tr>
<th>Year Ended 12/31</th>
<th>20X9</th>
<th>20X8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income</td>
<td>$420,000</td>
<td>$380,000</td>
</tr>
<tr>
<td>Retained earnings at beginning of year:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As previously reported</td>
<td>1,200,000</td>
<td>950,000</td>
</tr>
<tr>
<td>Adjustments (Note 1) net of taxes</td>
<td>(60,000)</td>
<td>(30,000)</td>
</tr>
<tr>
<td>As Restated</td>
<td>1,140,000</td>
<td>920,000</td>
</tr>
<tr>
<td>Dividends</td>
<td>180,000</td>
<td>160,000</td>
</tr>
<tr>
<td>Retained earnings at end of period:</td>
<td>$1,380,000</td>
<td>$1,140,000</td>
</tr>
</tbody>
</table>

NOTE 1: The balance of retained earnings at January 1, 20X9, has been restated to reflect a retroactive charge of $60,000 for amortization of patent not previously recognized. Of this amount, $30,000 ($0.02 per share) is applicable to 20X8 and has been reflected as an expense for that year; the remaining $30,000 (applicable to 20X7) is being charged to retained earnings at January 1, 20X8.

**DISCONTINUED OPERATIONS**

Discontinued operations are reported on one line in the special section under Continuing Operations and is shown net of tax (see page 12-1).

ASC 225 made some major changes in the reporting of discontinued operations:

1. The new definition of a discontinued operation is a component unit with a set of operating and cash flows that are clearly distinguishable from the rest of the entity for operational and financial reporting purposes. A component unit may be a reportable segment or an operating segment, a reporting unit, a subsidiary or an asset group. (See page 4-18 on reporting units.)
2. The ASC also requires that the entity not have any significant continuing post-disposal involvement in the discontinued components operations.
3. If a company commits to a plan to dispose of the component and completes the disposal within one accounting period, the operating results plus or minus the gain or loss on disposal are shown under Discontinued Operations Net of Tax.
4. If the company’s disposal plan extends over more than one accounting period, the accounting becomes more difficult. The component unit must qualify as “Held for Sale”. ASC 225, in paragraphs B70 to B79, list the criteria for held for sale as:
   a. Commit to a plan to sell
   b. Assets are available for sale
   c. Begun to actively seek a buyer
   d. Completion of sale within one year is probable
   e. Component is actively marketed at a reasonable price
   f. There is little chance of a significant change in or withdrawal of the plan
5. Once a component unit qualifies as held for sale, ASC 225 requires that the assets be tested for an impairment loss (see Ch. 11 for testing procedures). The impairment loss is then netted with the operational results to calculate the amount shown under Discontinued Operations.
For example:

On December 1, 20X5, the Johnson Co. committed to a plan to dispose of its Gilmore Company, a subsidiary. Gilmore’s assets were tested for impairment and a loss of $200,000 was calculated. This loss, plus Gilmore’s operational loss of $500,000, were reported as a $700,000 loss from discontinued operations before tax effects.

6. ASC 225 also requires that the operating results, plus or minus the gain or loss on disposal, be reported in the period(s) in which they occur.

Example:

On January 2, 2002, Jo Corp. agreed to sell its Ellen Division and the sale was completed on March 31, 2003. The Ellen Division had operational losses of $400,000 in 2002 and $100,000 for the first quarter of 2003, but the transaction resulted in a gain on sale of $600,000. Assuming that the criteria for discontinued operations are met and taxes are ignored, how would Jo Corp. report the disposal of the segment?

2002—Loss from Discontinued Operations $400,000
2003—Gain from Discontinued Operations ($600,000 gain – $100,000 loss) = $500,000

Other Points

Projections of operating income or loss should not ordinarily cover more than one year.

Adjustments, costs, and expenses that should have been recognized on a going concern basis up to the measurement date should not be included in the gain or loss on disposal. Examples: Adjustments of accruals on long-term contracts; write-down or write-off of receivables, inventories, property, plant equipment, research and development costs or other intangible assets.

Costs or adjustments directly associated with the decision to dispose include such items as severance pay, additional pension costs, employee relocation expenses, and future rentals on long-term leases. The notes to the financial statements encompassing the measurement date should include pertinent details of the disposal including what, when and how the disposal will be made, the remaining asset and liabilities of the segment at the balance sheet date, the income or loss from operations and the proceeds from disposal from the measurement date to the balance sheet date.

EXTRAORDINARY ITEMS—ASC 225

Criteria

Extraordinary items should be both
a. Unusual and
b. Infrequent

Unusual Nature: The underlying event or transaction should possess a high degree of abnormality and be of a type clearly unrelated to, or only incidentally related to, the ordinary and typical activities of the entity, taking into account the environment in which the entity operates.

The environment in which the entity operates is a primary consideration in determining whether an underlying event or transaction is abnormal and significantly different from the ordinary and typical activities of the entity. This includes the characteristics of the industry, the geographical location of operations, and nature and extent of governmental regulation. Unusual nature is not established by the fact that an event or transaction is beyond the control of management.

Infrequency: The underlying event or transaction should be of a type that would not reasonably be expected to recur in the foreseeable future, taking into account the environment in which the entity operates.
Determining the probability of recurrence of a particular event or transaction in the foreseeable future should take into account the entity environment. A transaction of an entity not reasonably expected to recur in the foreseeable future is considered to occur infrequently. By definition, extraordinary items occur infrequently.

**Case Examples:**

Events or transactions which would meet both criteria in the circumstances described are:

1. A large portion of a tobacco manufacturer's crops are destroyed by a hailstorm. Severe damage from hail storms in the locality where the manufacturer grows tobacco is rare.
2. A steel fabricating company sells the only land it owns. The land was acquired ten years ago for future expansion, but shortly thereafter the company abandoned all plans for expansion and held the land for appreciation.
3. A company sells a block of common stock of a publicly traded company. The block of shares, which represents less than 10% of the publicly held company, is the only security investment the company has ever owned.
4. An earthquake destroys one of the oil refineries owned by a large multinational oil company.

The following are illustrative of **events or transactions which do not meet both criteria in the circumstances described and thus should not be reported as extraordinary items**:

5. A citrus grower's Florida crop is damaged by frost. Frost damage is normally experienced every three or four years. The criterion of infrequency of occurrence taking into account the environment in which the company operates would not be met since the history of losses caused by frost damage provides evidence that such damage may reasonably be expected to recur in the foreseeable future.
6. A company which operates a chain of warehouses sells the excess land surrounding one of its warehouses. When the company buys property to establish a new warehouse, it usually buys more land than it expects to use for the warehouse with the expectation that the land will appreciate in value. In the past five years, there have been two instances in which the company sold such excess land. The criterion of infrequency of occurrence has not been met since past experience indicates that such sales may reasonably be expected to recur in the foreseeable future.
7. A large diversified company sells a block of shares from its portfolio of securities which it has acquired for investment purposes. This is the first sale from its portfolio of securities. Since the company owns several securities for investment purposes, it should be concluded that sales of such securities are related to its ordinary and typical activities in the environment in which it operates and thus the criterion of unusual nature would not be met.
8. A textile manufacturer with only one plant moves to another location. It has not relocated a plant in twenty years and has no plans to do so in the foreseeable future. Notwithstanding the infrequency of occurrence of the event as it relates to this particular company, moving from one location to another is an occurrence which is a consequence of customary and continuing business activities, some of which are finding more favorable labor markets, more modern facilities, and proximity to customers or suppliers. Therefore, the criterion of unusual nature has not been met and the moving expenses (and related gains and losses) should not be reported as an extraordinary item. Another example of an event which is a consequence of customary typical business activities (namely financing) is an unsuccessful public registration, the cost of which should not be reported as an extraordinary item.

**Items Not Extraordinary** (because they are usual and can be expected to recur)

a. Write-down or write-off of receivables, inventories, equipment leased to others, and other intangible assets.
b. Gains or losses from exchange or translation of foreign currencies, including those relating to major devaluations and revaluations.
c. Gains or losses on disposal of segment of a business.
d. Other gains or losses from sale or abandonment of property, plant, or equipment used in the business.
e. Effects of a strike, including those against competitors and major suppliers.
f. Adjustment of accruals on long-term contracts.

Rarely, an event such as the above may also meet the extraordinary criteria of unusualness and infrequency of occurrence. If so, gains and losses such as (a) and (d) above should be included in the extraordinary items if they are the direct result of a major casualty, an expropriation or a prohibition under a newly enacted law or regulation. Any portion of such losses that would have resulted from a valuation of assets on a going concern basis should not be included in extraordinary items.
**ASC 405**

Historically, gains or losses on retirement of debt and gains or losses by the debtor on restructuring of debt have been mandated by the ASC as extraordinary items. This changed with the issuance of ASC 405. ASC 405 considers these gains or losses to be ordinary unless the transaction meets the criteria established by ASC 405 of being both unusual and infrequent.

**Disclosure of Unusual or Infrequently Occurring Items**

A material event or transaction meeting one but not both of the extraordinary item criteria (unusualness and infrequency) should be reported as a separate component of income from continuing operations. The nature and financial effects of each event or transaction should be disclosed on the face of the income statement or in the notes to the financial statements.

**DISCLOSURE OF ACCOUNTING POLICIES—ASC 235**

Issuance of financial statements, purporting to present fairly such statements in accordance with GAAP should include a description of all significant accounting policies. This applies to profit or not-for-profit entities and situations where one or more of the basic statements are appropriately issued purporting to present financial position, results of operations or changes in financial position. Disclosure is not required for interim unaudited statements issued between annual reporting dates where the entity has not changed accounting policies since the end of the preceding year.

Disclosure should include accounting principles and methods of applying them that involve the following criteria:

a. A selection from existing acceptable alternatives. (Where there is only one acceptable application of GAAP, no disclosure is required.)

b. Principles and methods peculiar to the industry in which the reporting entity operates, even if such principles and methods are predominantly followed in that industry.

c. Unusual or innovative applications of generally accepted accounting principles (and, as applicable, of principles and methods peculiar to the industry in which the reporting entity operates).

Examples of disclosures by a business entity commonly required with respect to accounting policies would include, among others, those relating to depreciation methods, amortization of intangibles, inventory pricing, recognition of profit on long-term construction-type contracts, and recognition of revenue from franchising and leasing operations. This is not all-inclusive.

Disclosure need not duplicate details furnished elsewhere in the financial statements. In some cases, disclosure may be cross-referenced to other required disclosure; for example, the disclosure of a change in accounting principle as required by Opinion No. 20.

Format for disclosure is flexible, but it is suggested that disclosure be included separately under the heading: Summary of Significant Accounting Policies.

**INTERIM FINANCIAL STATEMENTS—ASC 270**

**In General**

The results for each interim period should be based on the accounting principles and practices used by an enterprise in the preparation of its latest annual financial statements unless a change in an accounting practice or policy has been adopted in the current year. Certain accounting principles and practices followed for annual reporting purposes may require modification at interim reporting dates so that the reported results for the interim period may better relate to the results of operations for the annual period. Some modifications are necessary at interim dates in accounting principles or practices followed for annual periods.

Interim financial information is essential to provide investors and others with timely information of the progress of the enterprise. Accordingly, each interim period should be viewed primarily as an integral part of an annual period.
Seasonal fluctuations in revenue and irregular incurrence of costs and expenses limit the comparability of operating results for interim periods.

**Guidelines for Preparing Interim Statements**

1. Revenue should be recognized as earned based on criteria used for the full year.
2. Costs and expenses associated directly with or allocated to products sold require the same treatment in interim statements as in fiscal-year financial statements.

**Exceptions for Cost of Goods Sold**

- If the gross profit method is used for preparing interim statements, such fact should be disclosed including any year-end adjustments resulting therefrom.
- If LIFO is used and the LIFO base is temporarily depleted during an interim period, the inventory reported at the interim date should not reflect the LIFO liquidation and the cost of goods sold should include the estimated cost of replacing the depleted LIFO base. Example: Assume that at the end of the 2nd quarter, the ending inventory was $25,000 below the LIFO base and the condition is temporary. Perpetual system is used.

Journal Entries:

1. At the end of the 2nd quarter
   
   Cost of Good Sold $25,000
   Allowance for temporary LIFO liquidation $25,000

2. When the inventory is replaced by purchase of $40,000 in merchandise
   
   Inventory $15,000
   Allowance for temporary LIFO liquidation 25,000
   Accounts Payable  $40,000

- LCM writedowns of inventories should be used in interim periods unless such writedowns are considered temporary.
- Standard cost variances should be reported for interim periods similar to fiscal year reporting; however, planned price or volume variances which are expected to be absorbed should be deferred until year end.

3. Costs other than product costs should be associated with interim periods based on benefits derived, time expired or activity associated with the period.
4. Seasonal variations in revenues, costs, etc., should be disclosed. For example, fixed costs can be allocated to interim periods based on expected sales activity where revenues follow a seasonal pattern.
5. Income tax expense should be based on an estimated effective rate for the year as a whole.
6. Extraordinary items and disposals of a segment of a business should be reflected in the period in which they occurred. Contingencies should be disclosed in interim reports in the same manner required for annual reports.
7. The tax effects of losses that arise in the early portion of a fiscal year (in the event carryback of such losses is not possible) should be recognized only when realization is assured beyond any reasonable doubt. An established seasonal pattern of loss in early interim periods offset by income in later interim periods should constitute evidence that realization is assured beyond reasonable doubt. The tax benefit of interim losses carried forward to a later interim period would reduce each later interim period's tax provision.
8. Each report of interim financial information should indicate any change in accounting principles or practices from those applied in (a) the comparable interim period of the prior annual period, (b) the preceding interim periods in the current annual period, and (c) the prior annual report.
9. When publicly traded companies report summarized financial information to their security holders at interim dates (including reports on 4th quarters), the following data should be reported, as a minimum:
   - Sales, provision for income taxes, extraordinary items, cumulative effect of a change in accounting principles or practices, and net income;
   - primary and fully diluted earnings per share data;
   - seasonal revenue, costs or expenses;
   - significant changes in estimates or provisions for income taxes;
   - disposal of a segment of a business and extraordinary, unusual or infrequent occurring items;
   - contingent items;
   - changes in accounting principles or estimates;
   - significant changes in financial position.
Treatment of Nonrecurring Adjustments Under ASC 250
ASC 250 requires that prior interim periods be restated for nonrecurring adjustments due to adjustment or settlement of litigation, income taxes, renegotiation proceedings or rate-making for utilities provided that each such adjustment meets each of the following criteria:
1. The adjustment is material.
2. The adjustment is specifically related to business activities of a specific prior interim period of the current year.
3. The amount of the adjustment or settlement could not have been reasonably estimated prior to the current interim period but becomes "reasonably estimable" during the current interim period.

An example of such an adjustment would be a change in the statutory rate of income tax which was enacted in September and applicable to the entire calendar year.

The adjustment should be reported as a restatement of the applicable prior interim periods with any amount applicable to prior fiscal years being reflected in the determination of net income of the first interim period of the current fiscal year.

REPORTING ACCOUNTING CHANGES IN INTERIM FINANCIAL STATEMENTS—ASC 270
ASC 270, Accounting Changes and Error Corrections apply to interim as well as annual financial statements. As discussed earlier in the chapter, the general rule for accounting for a change in accounting principle is the retrospective application method. This method is used unless it is impracticable to determine the effect on prior periods.

The impracticability exception does not apply to pre-change interim periods of the fiscal year of the change. When the effect of the change cannot be calculated for the pre-change interim periods, the FASB stated that the change must be made at the beginning of the next annual fiscal period.

For Example:
XVZ Corp. decides to make an accounting change on July 1, 20X7. XVZ states that it is impracticable to determine the effect of the change on the first two quarters of 20X7 and wants to make the change effective on July 1.

Since the first two quarters would use the old accounting principle and the last two quarters would use the new accounting principle, the financial results for the interim periods would not be comparable. In this situation, the FASB states that the impracticability exception cannot be used for interim periods and that XVZ could not implement the change in accounting principle until January 1, 20X8.

DISCLOSURES: Each interim period must show the effect of the change on (1) income from continuing operations (2) net income and (3) related earning per share amounts.

ASC 225—REPORTING COMPREHENSIVE INCOME
Definition
Comprehensive income is net income plus other comprehensive income.

Other Comprehensive Income
Other comprehensive income includes the following items and changes in each item:
  a. Foreign currency translation adjustments
  b. Change in pension prior service cost and unrealized gains or losses
  c. Unrealized gains and losses on certain investments in debt and equity securities
     (example: available-for-sale marketable securities)
Disclosure of Comprehensive Income
The FASB permits four alternative disclosures of the components of the comprehensive income (see Formats A, B, C and D on the following pages) and a disclosure of accumulated other comprehensive income in the equity section of The Statement of Financial Position (see the pages following Formats A, B, C and D).

a. **Format A** includes other comprehensive income as an integral part of the Statement of Income and Comprehensive Income.
b. **Format B** shows other comprehensive income as a separate Statement of Comprehensive Income following the Income Statement.
c. **Formats C and D** include other comprehensive income as a part of the Statement of Changes in equity.

Although the ASC 225 does not require a single display presentation for elements of comprehensive income and the total of comprehensive income, it does require that these items be presented in a financial statement that is displayed with the same prominence as other financial statements, which together constitute a full set of financial statements.

The total of other comprehensive income for a period is transferred to a stockholder’s equity account called accumulated other comprehensive income. The accumulated balance in this account for each classification must be disclosed in the balance sheet, a statement of changes in equity or the footnotes.

A total for comprehensive income is reported in interim financial statements.

Tax Effect
Other comprehensive items may be shown net of tax effects or before tax effects with one amount shown for the total tax (see Format A and the pages following Formats A, B, C and D).

Reclassification Adjustments
a. Reclassification of adjustments are made to avoid double accounting of items that are part of net income that may be included in the other comprehensive income of the current or earlier periods.
   *(Example: Realized gains on available-for-sale marketable equity securities recognized as a part of current net income were included in other comprehensive income as unrealized holding gains in a previous period. These unrealized holding gains must be deducted in the current period from other comprehensive income to avoid double accounting of the gains.)*
b. Reclassification adjustments must be shown separately for foreign currency items and unrealized gains and losses on certain investment in debt and equity securities.
c. Reclassification adjustments are not used with changes in pension prior service cost or unrealized gains or losses.

Earnings Per Share Not Required
Earnings per share numbers are not calculated for other comprehensive income or comprehensive income.

Other Terms
Although ASC 225 uses the term “comprehensive income,” other equivalent terms such as total nonowner changes in equity may be used.

Three Additional Examples of Other Comprehensive Income
ASC 815 – Accounting for derivatives and hedging activities added the following additional items to be included in comprehensive income:
- Gains or losses on cash flow hedges.
- Gains or losses on hedges of forecasted foreign-currency-denominated transactions.
- Gains or losses on hedging of a net investment in a foreign operation are reported in comprehensive income as part of the translation adjustment.

*Note: See Chapter 9 for coverage of derivatives.*
Examples of Disclosures

The following pages include examples of disclosures taken from ASC 225.

**Format A: One-Statement Approach**

**Enterprise**

**Statement of Income and Comprehensive Income**

**Year Ended December 31, 20X9**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$140,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>$(25,000)</td>
</tr>
<tr>
<td>Other gains and losses</td>
<td>$8,000</td>
</tr>
<tr>
<td>Gain on sale of securities</td>
<td>$2,000</td>
</tr>
<tr>
<td>Income from operations before tax</td>
<td>$125,000</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>$(31,250)</td>
</tr>
<tr>
<td>Income from continued operation</td>
<td>$93,750</td>
</tr>
<tr>
<td>Discontinued operations, net of tax</td>
<td>$(2,500)</td>
</tr>
<tr>
<td>Income before extraordinary item</td>
<td>$91,250</td>
</tr>
<tr>
<td>Extraordinary item, net of tax</td>
<td>$(28,000)</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>$63,250</td>
</tr>
</tbody>
</table>

Other comprehensive income, net of tax:

- Foreign currency translation adjustments\(^a\)        | $8,000       |
- Unrealized gains on securities:\(^b\)                   |             |
  - Unrealized holding gains arising during period        | $13,000      |
  - Less: reclassification adjustment for gains included in net income | $(1,500)  |
  - Change in prior service cost\(^c\)                     | $(2,500)     |
| **Other comprehensive income**                          | $17,000      |

**Comprehensive income**                                 | $(80,250)    |

Alternatively, components of other comprehensive income could be displayed before tax with one amount shown for the aggregate income tax expense or benefit:

Other comprehensive income, before tax:

- Foreign currency translation adjustments\(^a\)        | $10,666      |
- Unrealized gains on securities:\(^b\)                   |             |
  - Unrealized holding gains arising during period        | $17,333      |
  - Less: reclassification adjustment for gains included in net income | $(2,000)  |
  - Change in prior service cost\(^c\)                     | $(3,333)     |
| **Other comprehensive income, before tax**              | $22,666      |

**Income tax expense related to items of other comprehensive income** | $(5,666) |

**Other comprehensive income, net of tax**                | $17,000      |

---

\(^a\) It is assumed that there was no sale or liquidation of an investment in a foreign entity. Therefore, there is no reclassification adjustment for this period.

\(^b\) This illustrates the gross display. Alternatively, a net display can be used, with disclosure of the gross amounts (current-period gain and reclassification adjustment) in the notes to the financial statements.

\(^c\) This illustrates the required net display for this classification.
Format B: Two-Statement Approach

Enterprise
Statement of Income
Year Ended December 31, 20X9

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$140,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>(25,000)</td>
</tr>
<tr>
<td>Other gains and losses</td>
<td>8,000</td>
</tr>
<tr>
<td>Gain on sale of securities</td>
<td>2,000</td>
</tr>
<tr>
<td>Income from operations before tax</td>
<td>125,000</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>(31,250)</td>
</tr>
<tr>
<td>Income from continued operations</td>
<td>93,750</td>
</tr>
<tr>
<td>Discontinued operations, net of tax</td>
<td>(2,500)</td>
</tr>
<tr>
<td>Income before extraordinary item</td>
<td>91,250</td>
</tr>
<tr>
<td>Extraordinary item, net of tax</td>
<td>(28,000)</td>
</tr>
<tr>
<td>[Net income, net of tax]</td>
<td>$ 63,250</td>
</tr>
</tbody>
</table>

Enterprise
Statement of Comprehensive Income
Year Ended December 31, 20X9

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>$ 63,250</td>
</tr>
<tr>
<td>Other comprehensive income, net of tax</td>
<td></td>
</tr>
<tr>
<td>Foreign currency translation adjustments^a</td>
<td>8,000</td>
</tr>
<tr>
<td>Unrealized gains on securities, b</td>
<td></td>
</tr>
<tr>
<td>Unrealized holding gains arising during period</td>
<td>$13,000</td>
</tr>
<tr>
<td>Less: reclassification adjustment for gains included in net income</td>
<td>(1,500)</td>
</tr>
<tr>
<td>Change in prior service cost^c</td>
<td>(2,500)</td>
</tr>
<tr>
<td>Other comprehensive income</td>
<td>17,000</td>
</tr>
<tr>
<td>[Comprehensive income]</td>
<td>$80,250</td>
</tr>
</tbody>
</table>

Alternatively, components of other comprehensive income could be displayed before tax with one amount shown for the aggregate income tax expense or benefit as illustrated in Format A.

^a It is assumed that there was no sale or liquidation of an investment in a foreign entity. Therefore, there is no reclassification adjustment for this period.

^b This illustrates the gross display. Alternatively, a net display can be used, with disclosure of the gross amounts (current-period gain and reclassification adjustment) in the notes to the financial statements.

^c This illustrates the required net display for this classification.
### Format C: Statement-of-Changes-in-Equity Approach (Alternative 1)

**Enterprise**  
**Statement of Changes in Equity**  
**Year Ended December 31, 20X9**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Comprehensive Income</th>
<th>Retained Earnings</th>
<th>Accumulated Comprehensive Income</th>
<th>Common Stock</th>
<th>Paid-in Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning balance</strong></td>
<td>$563,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comprehensive Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>63,250</td>
<td>[$63,250]</td>
<td>63,250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comprehensive income, net of tax</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unrealized gains on securities, net of reclassification adjustment (see disclosure)</td>
<td>11,500</td>
<td>11,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign currency translation adjustments</td>
<td>8,000</td>
<td>8,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in prior service cost</td>
<td>(2,500)</td>
<td>(2,500)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comprehensive income</td>
<td></td>
<td>17,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comprehensive income</strong></td>
<td></td>
<td>[$80,250]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Common stock issued</strong></td>
<td>150,000</td>
<td></td>
<td></td>
<td></td>
<td>50,000</td>
<td>100,000</td>
</tr>
<tr>
<td><strong>Dividends declared on common stock</strong></td>
<td>(10,000)</td>
<td>(10,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ending balance</strong></td>
<td>$783,750</td>
<td>$141,750</td>
<td>$42,000</td>
<td>$200,000</td>
<td>$400,000</td>
<td></td>
</tr>
</tbody>
</table>

**Disclosure of reclassification amount:**

Unrealized holding gains arising during period | $13,000
Less: reclassification adjustment for gains included in net income | (1,500)
Net unrealized gains on securities | $11,500

---

a Alternatively, an enterprise can omit the separate column labeled “Comprehensive Income” by displaying an aggregate amount for comprehensive income ($80,250) in the “Total” column.

b It is assumed that there was no sale or liquidation of an investment in a foreign entity. Therefore, there is no reclassification adjustment for this period.
### Format D: Statement-of-Changes-in-Equity Approach (Alternative 2)

**Enterprise**  
**Statement of Changes in Equity**  
**Year Ended December 31, 20X9**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained earnings</td>
<td></td>
</tr>
<tr>
<td>Balance at January 1</td>
<td>$88,500</td>
</tr>
<tr>
<td>Net income</td>
<td>63,250</td>
</tr>
<tr>
<td>Dividends declared on common stock</td>
<td>(10,000)</td>
</tr>
<tr>
<td>Balance at December 31</td>
<td>141,750</td>
</tr>
<tr>
<td>Accumulated other comprehensive income&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Balance at January 1</td>
<td>25,000</td>
</tr>
<tr>
<td>Unrealized gains on securities, net of reclassification adjustment (see disclosure)</td>
<td>11,500</td>
</tr>
<tr>
<td>Foreign currency translation adjustments</td>
<td>8,000</td>
</tr>
<tr>
<td>Change in prior service cost</td>
<td>(2,500)</td>
</tr>
<tr>
<td>Other comprehensive income</td>
<td>17,000</td>
</tr>
<tr>
<td>Comprehensive income</td>
<td>$80,250</td>
</tr>
<tr>
<td>Balance at December 31</td>
<td>42,000</td>
</tr>
<tr>
<td>Common stock</td>
<td></td>
</tr>
<tr>
<td>Balance at January 1</td>
<td>150,000</td>
</tr>
<tr>
<td>Shares issued</td>
<td>50,000</td>
</tr>
<tr>
<td>Balance at December 31</td>
<td>200,000</td>
</tr>
<tr>
<td>Paid-in capital</td>
<td></td>
</tr>
<tr>
<td>Balance at January 1</td>
<td>300,000</td>
</tr>
<tr>
<td>Common stock issued</td>
<td>100,000</td>
</tr>
<tr>
<td>Balance at December 31</td>
<td>400,000</td>
</tr>
<tr>
<td>Total equity</td>
<td>$783,750</td>
</tr>
</tbody>
</table>

**Disclosure of reclassification amount:<sup>b</sup>**

- Unrealized holding gains arising during period: $13,000
- Less: reclassification adjustment for gains included in net income: (1,500)
- Net unrealized gains on securities: $11,500

---

<sup>a</sup> All items of other comprehensive income are displayed net of tax.

<sup>b</sup> It is assumed that there was no sale or liquidation of an investment in a foreign entity. Therefore, there is no reclassification adjustment for this period.
All Formats: Accompanying Statement of Financial Position

Enterprise
Statement of Financial Position
December 31, 20X9

Assets:
- Cash $150,000
- Accounts receivable 175,000
- Available-for-sale securities 112,000
- Plant and equipment 985,000
  Total assets $1,422,000

Liabilities:
- Accounts payable $112,500
- Accrued liabilities 79,250
- Pension liability 128,000
- Notes payable 318,500
  Total liabilities $638,250

Equity:
- Common stock $200,000
- Paid-in capital 400,000
- Retained earnings 141,750
  Accumulated other comprehensive income 42,000
  Total equity $783,750
  Total liabilities and equity $1,422,000

All Formats: Required Disclosure of Related Tax Effects Allocated to Each Component of Other Comprehensive Income

Enterprise
Notes to Financial Statements
Year Ended December 31, 20X9

<table>
<thead>
<tr>
<th></th>
<th>Before-Tax Amount</th>
<th>Tax (Expense) or Benefit</th>
<th>Net-of-Tax Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign currency translation adjustment</td>
<td>$10,666</td>
<td>($2,666)</td>
<td>$8,000</td>
</tr>
<tr>
<td>Unrealized gains on securities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unrealized holding gains arising during period</td>
<td>17,333</td>
<td>(4,333)</td>
<td>13,000</td>
</tr>
<tr>
<td>Less: reclassification adjustment for gains realized</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In net income</td>
<td>(2,000)</td>
<td>500</td>
<td>(1,500)</td>
</tr>
<tr>
<td>Net unrealized gains</td>
<td>15,333</td>
<td>(3,833)</td>
<td>11,500</td>
</tr>
<tr>
<td>Change in prior service cost</td>
<td>(3,333)</td>
<td>833</td>
<td>(2,500)</td>
</tr>
<tr>
<td>Other comprehensive income</td>
<td>$22,666</td>
<td>($15,666)</td>
<td>$7,000</td>
</tr>
</tbody>
</table>

Alternatively, the tax amounts for each component can be displayed parenthetically on the face of the financial statement in which comprehensive income is reported.
All Formats: Disclosure of Accumulated Other Comprehensive Income Balances

Enterprise
Notes to Financial Statements
Year Ended December 31, 20X9

<table>
<thead>
<tr>
<th>Foreign Currency Items</th>
<th>Unrealized Gains on Securities</th>
<th>Minimum Pension Liability Adjustment</th>
<th>Accumulated Other Comprehensive Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning balance</td>
<td>$(500)</td>
<td>$25,500</td>
<td>$25,000</td>
</tr>
<tr>
<td>Current-period change</td>
<td>8,000</td>
<td>11,500</td>
<td>(2,500)</td>
</tr>
<tr>
<td>Ending balance</td>
<td>$7,500</td>
<td>$37,000</td>
<td>$42,000</td>
</tr>
</tbody>
</table>

Alternatively, the balances of each classification within accumulated other comprehensive income can be displayed in a statement of changes in equity or in a statement of financial position.

ACCOUNTING AND REPORTING BY DEVELOPMENT STAGE ENTERPRISES—ASC 225

Summary: Some development stage enterprises have developed specialized accounting and reporting practices. Such enterprises are now required to present financial statements in conformity with generally accepted accounting principles with revenue and expense recognition to be the same as applied to established enterprises. Further, development stage companies are required to disclose additional information.

Development Stage Enterprise Defined
An enterprise is considered in the development stage if it is devoting substantially all of its efforts to establishing a new business and either planned principal operations have not begun, or if operations have begun, there has been no significant revenue therefrom.

Financial Accounting and Reporting
Financial statements should present financial position, changes in financial position and results of operations in conformity with generally accepted accounting principles that apply to established operating enterprises. GAAP should be applied to expense and revenue recognition; deferral of costs and capitalization should be subject to the same assessment of recoverability that would be applicable in an established operating enterprise. For a subsidiary or investee, the recoverability of costs should be assessed within the entity for which separate financial statements are being presented.

Disclosures
The basic financial statement(s) to be presented should include the following information:
(a) A balance sheet showing any accumulated net losses with a descriptive caption such as "deficit accumulated during the development stage" in the stockholders' equity section.
(b) An income statement, showing amounts of revenue and expenses for each period covered by the income statement and cumulative amounts from the enterprise's inception.
(c) A statement of cash flows showing the investing and financing activities for each period and cumulative amounts from the enterprise's inception.
(d) A statement of stockholders' equity showing from the enterprise's inception:
   1. For each issuance, the date and number of shares of stock, warrants, rights, or other equity securities issued for cash or other consideration.
   2. For each issuance, the dollar amounts assigned to the consideration received for shares of stock, warrants, rights, or other equity securities. Dollar amounts should be assigned to any noncash consideration received.
   3. For each issuance involving noncash consideration, the nature of the noncash consideration and the basis for assigning amounts.
The financial statements should be identified as those of a development stage enterprise and include a description of the activities in which the enterprise is engaged.

**Transition from Development Stage**
The first fiscal year in which an enterprise is no longer considered in the development stage should disclose its prior status as a development stage enterprise.

**ACCOUNTING BY DEBTORS AND CREDITORS FOR TROUBLED DEBT RESTRUCTURINGS—ASC 405**
A restructuring of a debt constitutes a "Troubled Debt Restructuring" when a creditor, for economic or legal reasons related to the debtor's financial difficulties, grants a concession (by agreement or imposition of law or a court) to the debtor that it would not otherwise consider. A creditor participates in a troubled debt restructuring because it no longer expects its investment to earn the original rate of return expected and may view loss of all or part of its investment as likely if the debt is not restructured. For the purposes of this statement, debt represents a contractual right to receive, or obligation to pay, money that is already included as an asset or liability in the creditor's or debtor's balance sheet at the time of the restructuring and consists of such items as accounts receivable or payable, notes, debentures, bonds (secured or unsecured, convertible or nonconvertible), and related accrued interest. "Debt" does not include lease agreements or employment-related agreements.

**Accounting by Debtors**
The accounting treatment for troubled debt restructuring depends on the type of restructuring as follows:

- **Transfer of Assets in Full Settlement:** The excess of the carrying value of the debt settled over the fair value of the assets transferred to the creditor should be recognized as a gain on debt restructuring. A difference between the fair value and carrying value of the asset transferred to the creditor should be recognized as a gain or loss on the transfer of assets, included in the determination of net income for the period of transfer, and reported in accordance with ASC 405. (Note that a gain on debt restructuring and a gain or loss on the transfer of assets may be reported.)

- **Grant of an Equity Interest in Full Settlement:** The excess of the carrying value of the debt settled over the fair value of the equity interest granted to the creditors should be recognized as a gain on debt restructuring. The equity interest granted is to be recorded at its fair value.

- **Modification of Terms:**
  
  a. Total future cash payments of interest and principal equal or exceed the carrying value of the debt. The carrying value of the debt should not change and the effects of changes in the amount or timing (or both) of future interest or principal (or both) payments are reflected in future periods. Interest expense is computed in a way that a constant effective interest rate is applied to the carrying amount of the debt at the beginning of each period between restructuring and maturity (refer to Chapter 9, Amortization of Bond Discount and Premium—Effective Interest Method). The new effective interest rate is the discount rate that equates the present value of the future cash payments specified by the new terms with the carrying value of the debt.

  b. Total future cash payments of interest and principal are less than the carrying value of the debt. The carrying value of the debt is reduced to an amount equal to the total future cash payments specified by the new terms and a gain is recognized on the reduction of the debt equal to the amount of the reduction. Thereafter, all future cash payments are accounted for as reductions of the carrying value of the debt and no interest expense is recognized for any period between restructuring and maturity.

- **Combination of Above Types:** The fair value of assets transferred or equity interest granted in partial settlement shall first be applied to the reduction of the carrying value of the debt; then, the modification of terms is accounted for as prescribed above. No gain on debt restructuring is recognized unless the remaining carrying value of the debt (after application of fair value of assets transferred and equity interest granted) exceeds the total future cash payments.

SFAS #145 requires that gains recognized on restructuring should be aggregated, included in income for the period of restructuring and normally reported as a part of income from continuing operations.
Accounting by Creditors

The accounting for troubled debt restructuring depends on the type of restructuring as follows:

- **Receipt of Assets in Full Settlement (including equity interest in debtor):** The assets received are to be recorded at their fair market value when received, and the excess of the carrying value of the investment in the receivable (debt) satisfied over the fair value of the assets received should be recognized as a loss. Subsequently, the creditor should account for the assets received the same as if the assets had been acquired for cash.

- **Modification of Terms:** ASC 405 requires the creditor to recognize a new value for the loan receivable. This new value is the present value of the future cash flows from the restructured agreement discounted at the historical (original) interest rate (not the interest rate in the restructuring agreement). An ordinary loss is recognized as the difference between the carrying value of the loan and the present value of the future cash flows. Interest revenue after the restructuring should be based on the historical (original) interest rate times the new carrying value of the loan receivable.

Losses recognized on debt restructuring, to the extent that they are not offset against allowance for uncollectible amounts or other valuation accounts, should be included in the determination of net income for the period of the restructuring and reported according to ASC 405.

**Troubled Debt Restructuring**

Trouble Company which is experiencing financial difficulty has a note payable of $500,000 and the current year's interest of $50,000 outstanding at December 31 of the current year. The note is a 10% obligation due at the end of the following year.

A. Lender accepts land from Trouble Company in full payment of the note. The land has a fair value of $400,000 and a book value of $220,000. The entry to be made upon execution of the agreement:

<table>
<thead>
<tr>
<th><strong>Trouble Co. (000)</strong></th>
<th><strong>Lender (000)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued interest payable</td>
<td>$ 50</td>
</tr>
<tr>
<td>Note payable</td>
<td>500</td>
</tr>
<tr>
<td>Land</td>
<td>$220</td>
</tr>
<tr>
<td>Gain on disposal of fixed asset</td>
<td>180</td>
</tr>
<tr>
<td>Loan loss</td>
<td>150</td>
</tr>
<tr>
<td>Gain on restructuring of debt</td>
<td>150</td>
</tr>
<tr>
<td>Note receivable</td>
<td>$500</td>
</tr>
<tr>
<td>Accrued interest receivable</td>
<td>50</td>
</tr>
<tr>
<td>Gain on restructuring of debt</td>
<td>150</td>
</tr>
</tbody>
</table>

B. Lender accepts Trouble Company stock with a par value of $100,000 and a fair market value of $400,000 in full payment of the note.

<table>
<thead>
<tr>
<th><strong>Trouble Co. (000)</strong></th>
<th><strong>Lender (000)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued interest payable</td>
<td>$ 50</td>
</tr>
<tr>
<td>Note payable</td>
<td>500</td>
</tr>
<tr>
<td>Common stock</td>
<td>$100</td>
</tr>
<tr>
<td>Capital in excess of par</td>
<td>300</td>
</tr>
<tr>
<td>Gain on restructuring of debt</td>
<td>150</td>
</tr>
<tr>
<td>Investment in Trouble Co.</td>
<td>$400</td>
</tr>
<tr>
<td>Loan loss</td>
<td>150</td>
</tr>
<tr>
<td>Note receivable</td>
<td>$500</td>
</tr>
<tr>
<td>Accrued interest receivable</td>
<td>50</td>
</tr>
</tbody>
</table>

C. Lender agrees to extend the note for two years beyond the original due date, forgive the $50,000 accrued interest, reduce the principal of the note to $400,000, and revise the interest rate to 8%.
DEBTOR - TROUBLE CO.

Future cash payments = $400,000 + ($32,000 \times 3) = $496,000
Carrying value (including interest) = 550,000

Ordinary gain $ 54,000

Journal entry when agreement is signed:

Accrued interest payable $50,000
Note payable 4,000
Gain on restructuring of debt $54,000

CREDITOR - LENDER

In accordance with ASC 405 the creditor should record the note receivable at the present value of future cash flows at the historical interest rate of 10% based on the restructured receipts of $400,000 for the principal and $32,000 per year for the interest ($400,000 \times 8% = $32,000).

Present value of future cash flows at 10%:

<table>
<thead>
<tr>
<th>FUTURE RECEIPTS</th>
<th>PRESENT VALUE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OF 1 FACTOR</td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>32,000</td>
<td>x .909091 = $ 29,091</td>
</tr>
<tr>
<td>Year 2</td>
<td>32,000</td>
<td>x .826446 = 26,446</td>
</tr>
<tr>
<td>Year 3</td>
<td>32,000</td>
<td>x .751315 = 24,042</td>
</tr>
<tr>
<td>Year 4</td>
<td>400,000</td>
<td>x .751315 = 300,526</td>
</tr>
</tbody>
</table>

Total Present Value $ 380,105

Carrying value on books (500,000 + 50,000) 550,000

Loss on loan restructuring $ 169,895

Journal entry when agreement is signed:

Loss on loan restructuring 169,895
Interest receivable 50,000
Notes receivable 119,895

Journal entries to record interest revenue and receipt of the interest and principal are based on the amortization table listed below:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>32,000</td>
<td>32,000</td>
</tr>
<tr>
<td>Notes receivable</td>
<td>6,010</td>
<td>6,612</td>
</tr>
<tr>
<td>Interest revenue</td>
<td>38,010</td>
<td>38,612</td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>400,000</td>
<td></td>
</tr>
<tr>
<td>Notes receivable</td>
<td>400,000</td>
<td></td>
</tr>
</tbody>
</table>
Amortization of "Discount" on Notes Receivable

<table>
<thead>
<tr>
<th></th>
<th>10% Interest</th>
<th>8% Cash Interest</th>
<th>Addition to Carrying Value (Amtz. Discount)</th>
<th>of Notes Receivable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance</td>
<td></td>
<td></td>
<td></td>
<td>380,105</td>
</tr>
<tr>
<td>Year 1</td>
<td>38,010</td>
<td>32,000</td>
<td>6010</td>
<td>386,115</td>
</tr>
<tr>
<td>Year 2</td>
<td>38,612</td>
<td>32,000</td>
<td>6612</td>
<td>392,727</td>
</tr>
<tr>
<td>Year 3</td>
<td>39,273</td>
<td>32,000</td>
<td>7273</td>
<td>400,000</td>
</tr>
</tbody>
</table>

D. Lender agrees to extend the note for two years beyond the original due date, forgive the accrued interest, reduce the principal amount of the note to $450,000 and revise the interest rate to 9%.

**DEBTOR - TROUBLE CO.**

Future cash payments = $450,000 + ($40,500 × 3) = $571,500  
Carrying value (including interest) = $550,000  
Future interest to be recognized* = $21,500

Journal entry when agreement is signed:  
Accrued interest payable $50,000  
Note payable $50,000

Journal entry when first cash payment is made:  
*Interest expense $7,700  
Note payable 32,800  
Cash $40,500

*Represents an interest rate of 1.4% on the new carrying value of $550,000.

**CREDITOR - LENDER**

Journal entry when agreement is signed:  
Loss on loan restructuring 111,191  
Interest receivable 50,000  
Note receivable 61,191

The present value of future payments of $40,500 interest per year and $450,000 principal are as follows: Year 1 - $40,500 × .909091 = $36,818; Year 2 - $40,500 × .826446 = $33,471; Year 3 - $40,500 × .751315 = $30,428 and Year 3 - $450,000 × .751315 = $338,092 for a total of $438,809. The loss on loan restructuring is the carrying value less the present value of future cash flows ($550,000 - 438,809 = $111,191).

Journal entry when first cash payment is made:  
Cash 40,500  
Notes receivable 3,381  
Interest revenue (a) 43,881

(a) Interest revenue is the historical interest rate × the total present value (10% × 438,809 = $43,881).

**Loan Impairments - Creditors**

A loan impairment should be differentiated from a debt restructuring. An impairment does not involve a formal restructuring but is a conclusion by the creditor, based on its normal review procedures, that there is a problem with the collectibility of the loan receivable. ASC 405 states that a loan is impaired when it is probable that a creditor will be unable to collect all amounts due according to the contracted terms. The calculation of the loss on
Impairment is similar to the calculation of the loss on debt restructuring in which there is a modification of terms. The creditor calculates the present value of future cash flows using the historical (original) interest rate and the difference between the cash flows and the carrying value of the loan is the loss. The loss should be charged to Bad Debt Expense and credited to the Allowance for Doubtful Loans.

ASC 405 allows an alternative calculation in which the impaired loan may be measured at the loan's observable market price of the fair value of the collateral.

Example of Loan Impairment:

On January 1, 20X2, ABC Corporation received a $50,000, 3-year non-interest bearing note yielding 8% from XYZ Corporation. At December 31, 20X2, ABC determines through its normal credit review procedures that it is probable that XYZ will not be able to pay but $40,000 of the $50,000 loan. The loss on impairment would be calculated:

\[
\begin{align*}
\text{Carrying Value - 12/31/X2} & \quad (a) \quad \$42,867 \\
\text{Less present value of future cash receipts} & \quad (\$40,000 \times \text{PV of 1 for 2 periods at 8\%} = 40,000 \times .857339) \quad (34,294) \\
\text{Loss on Impairment at 12/31/X2} & \quad 8,573
\end{align*}
\]

The journal entry to record the impairment:

\[
\begin{align*}
\text{Bad Debt Expense} & \quad 8,573 \\
\text{Allowance for Doubtful Loans} & \quad 8,573
\end{align*}
\]

Note: ABC's future interest revenue will be based on the new carrying value of $34,294.

(a). The calculation of the carrying value of the loan at 12/31/X2:

\[
\begin{align*}
\text{Balance 1/1/X2} = \text{Present Value of$50,000 for 3 periods at 8\%} & \quad (50,000 \times .793832) \quad \$39,692 \\
\text{Plus Amortization of Discount on the note for 20X2} & \quad 8\% \times \text{January 1 carrying value (8\% \times 39,692)} \quad 3,175 \\
\text{Total carrying value 12/31/X2} & \quad 8,573
\end{align*}
\]

IFRS - INCOME STATEMENT

In comparing Income Statements prepared under IFRS vs US GAAP, there are more similarities than there are differences. Formats are basically the same. The accounting for correction of an error, change in accounting estimate, change in accounting principles and the accounting for discontinued operation are also basically the same.

Some of the differences are that the recording of extraordinary items is prohibited, comparative statements are required, and expenses may be reported by natural (object) or by function. Examples of disclosing expenses by function are Research and Development expenses, Selling expenses, Distribution expenses. Examples of expenses disclosed by the natural classification are payroll expenses, utilities, fringe benefits expenses, social security expenses, etc. In governmental accounting, this natural classification is called classification by object of the expenditure.

IFRS allows the reporting of comprehensive income in one combined statement of income and comprehensive income or as two statements: an income statement and a statement of comprehensive income. IFRS does not allow comprehensive income to be shown as a part of the statement of owners equity. The last difference is that under IFRS statement the net income is usually described as profit and loss.
Under IFRS changes in accounting policies are permitted if the change will result in a more “reliable and relevant presentation of the financial statements.” Under US GAAP, the FASB simply requires that the entity “justify the change.”

### FAST TRACK SUMMARY
#### INCOME STATEMENT

<table>
<thead>
<tr>
<th></th>
<th>IFRS</th>
<th>US GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in Accounting Policies</td>
<td>If presents more reliable and relevant financial statements</td>
<td>Justify the change</td>
</tr>
<tr>
<td>Change in Accounting Estimates</td>
<td>Same</td>
<td>Same</td>
</tr>
<tr>
<td>Change in Accounting Principle</td>
<td>Same</td>
<td>Same</td>
</tr>
<tr>
<td>Correcting of Error</td>
<td>Basically the same</td>
<td>Basically the same</td>
</tr>
<tr>
<td>Discontinued operation</td>
<td>Basically the same</td>
<td>Basically the same</td>
</tr>
<tr>
<td>Extraordinary items</td>
<td>Prohibited</td>
<td>Unusual and infrequent</td>
</tr>
<tr>
<td>Comparative statements</td>
<td>Two-years required</td>
<td>Usually two years, but not required</td>
</tr>
<tr>
<td>Comprehensive Income</td>
<td>One combined statements</td>
<td>One combined statement</td>
</tr>
<tr>
<td>Complementary statements</td>
<td>Two separate statements</td>
<td>Two separate statements</td>
</tr>
<tr>
<td>Classified as part of owners’ equity</td>
<td>Prohibited</td>
<td>Part of owners’ equity</td>
</tr>
<tr>
<td>Terminology</td>
<td>Profit and loss</td>
<td>Net income</td>
</tr>
<tr>
<td>Classification of expenses</td>
<td>Function or Natural</td>
<td>Function</td>
</tr>
<tr>
<td>Income Statement Format</td>
<td>Not specified</td>
<td>Multi-step or Single step</td>
</tr>
</tbody>
</table>
Chapter Twelve  
Reporting the Results of Operations Questions

INCOME STATEMENT FORMAT

**Items 1 and 2** are based on the following:
Vane Co's trial balance of income statement accounts for the year ended December 31, 20X5, included the following:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$575,000</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>$240,000</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>70,000</td>
</tr>
<tr>
<td>Loss on sale of equipment</td>
<td>10,000</td>
</tr>
<tr>
<td>Sales commissions</td>
<td>50,000</td>
</tr>
<tr>
<td>Interest revenue</td>
<td>25,000</td>
</tr>
<tr>
<td>Freight out</td>
<td>15,000</td>
</tr>
<tr>
<td>Loss from earthquake damage</td>
<td>20,000</td>
</tr>
<tr>
<td>Uncollectible accounts expense</td>
<td>15,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$420,000</td>
</tr>
<tr>
<td></td>
<td>$600,000</td>
</tr>
</tbody>
</table>

**Other information:**
- Finished goods inventory:
  - January 1, 20X5 $400,000
  - December 31, 20X5 360,000
- Earthquakes are rare in the area in which the company is located.
- Vane's income tax rate is 30%. In Vane's 20X5 multiple-step income statement,

1. What amount should Vane report as the cost of goods manufactured?
   a. $200,000.
   b. $215,000.
   c. $280,000.
   d. $295,000.

2. What amount should Vane report as income after income taxes from continuing operations?
   a. $126,000.
   b. $129,500.
   c. $140,000.
   d. $147,000.

3. Brock Corp. reports operating expenses in two categories: (1) selling and (2) general and administrative. The adjusted trial balance at December 31, 20X6, included the following expense and loss accounts:

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting and legal fees</td>
<td>$120,000</td>
</tr>
<tr>
<td>Advertising</td>
<td>150,000</td>
</tr>
<tr>
<td>Freight out</td>
<td>80,000</td>
</tr>
<tr>
<td>Interest</td>
<td>70,000</td>
</tr>
<tr>
<td>Loss on sale of long-term investment</td>
<td>30,000</td>
</tr>
<tr>
<td>Officers' salaries</td>
<td>225,000</td>
</tr>
<tr>
<td>Rent for office space</td>
<td>220,000</td>
</tr>
<tr>
<td>Sales salaries and commissions</td>
<td>140,000</td>
</tr>
</tbody>
</table>

   One-half of the rented premises is occupied by the sales department.

   Brock's total selling expenses for 20X6 are
   a. $480,000
   b. $400,000
   c. $370,000
   d. $360,000

4. In Baer Food Co.'s 20X7 single-step income statement, the section titled "Revenues" consisted of the following:

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales revenue</td>
<td>$187,000</td>
</tr>
<tr>
<td>Gain from Discontinued Operations</td>
<td></td>
</tr>
<tr>
<td>including gain on disposal of</td>
<td></td>
</tr>
<tr>
<td>$21,000 and net taxes of $6,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Interest revenue</td>
<td>10,200</td>
</tr>
<tr>
<td>Gain on sale of equipment</td>
<td>4,700</td>
</tr>
<tr>
<td>Extraordinary gain net of</td>
<td></td>
</tr>
<tr>
<td>$750 tax effect</td>
<td>1,500</td>
</tr>
<tr>
<td>Total revenues</td>
<td>$215,400</td>
</tr>
</tbody>
</table>

   In the revenues section of the 20X7 income statement, Baer Food should have reported total revenues of
   a. $216,300
   b. $215,400
   c. $203,700
   d. $201,900
DISCONTINUED OPERATIONS

5. On September 30, 2004, ABC Corp.'s Board of Directors committed to a plan to sell its food component and to sell the component's assets on the open market in early 2005. As a result, the component’s operations and cash flows will be eliminated from the entity’s operations and the entity will have no significant continuing post-disposal involvement in the component’s operations. The component is classified as “held-for-sale”. The component had an operating loss for the period October 1 to December 31, 2004. How would the component’s fourth quarter loss be reported in the 2004 financial statements?
   a. Loss on disposal of discontinued equipment.
   b. Loss from operations of discontinued component.
   c. Loss from continuing operations.
   d. Extraordinary loss.

6. A component unit that is considered a discontinued operation is
   a. An extraordinary item.
   b. A separate line of business or a class of customer.
   c. An unrelated group of assets held for sale.
   d. A set of operations and cash flows clearly distinguishable from the rest of the entity for operational and financial reporting purposes.

7. On November 30, 20X5, Pearman Company committed to a plan to sell a component unit that met the criteria for a discontinued operation and was properly classified as held for sale. The component unit was tested for impairment and a $400,000 loss was calculated. The component unit’s loss from operations was $1,000,000. The final sale was expected to occur on February 15, 20X6. What amount(s) should report as loss from discontinued operation before consideration of the tax effects?
   a. $1,400,000 loss.
   b. $400,000 loss.
   c. $1,000,000.
   d. $400,000 impairment loss and $1,000,000 loss from discontinued operations.

8. Hambons Fast Foods has subsidiaries in North Carolina, Georgia and Maine. In 20X5, Hambons committed to a plan to sell the subsidiaries in Georgia and North Carolina. The subsidiaries are classified as held for sale. Hambons will not have any post-disposal involvement with the Georgia subsidiary and their operations and cash flows will be eliminated from Hambons’ consolidated statements. The North Carolina subsidiary will continue to be significantly involved with Hambons after the sale is completed. Which subsidiaries would Hambons report as discontinued operations?
   a. Georgia Yes North Carolina Yes
   b. Yes No
   c. No Yes
   d. No No

9. On April 27, 20X5, ABC committed to a plan to sell a component unit. As a result, the component unit’s operations and cash flows will be eliminated from ABC’s operations and ABC will not have any significant post-sale involvement in the component’s operations. The component was sold on December 25 for a gain of $100,000. During the period from January 1, 20X5, to April 27, 20X5, the component unit had income of $150,000. However, from the period April 27 to December 25 the component suffered a loss of $50,000. Ignoring taxes, what should ABC report for discontinued operations for 20X5?
   a. $50,000
   b. $50,000 loss
   c. $200,000
   d. $400,000 impairment loss and $1,000,000 loss from discontinued operations.

10. On December 31, 20X4, Greer Co. entered into an agreement to sell its Hart segment’s assets. On that date, Greer estimated the gain from the disposition of the assets in 20X5 would be $700,000 and Hart’s 20X5 operating losses would be $200,000. As a result of the sale, the component’s operations and cash flows will be eliminated from the entity’s operations and the entity will not have any significant continuing post-sale involvement in the component’s operations. The component is classified as held for sale. Hart’s actual operating losses were $300,000 in both 20X4 and 20X5, and the actual gain on disposition of Hart’s assets in 20X5 was $650,000. Disregarding income taxes, what net gain (loss) should be reported for discontinued operations in Greer’s comparative 20X5 and 20X4 income statements?

<table>
<thead>
<tr>
<th></th>
<th>20X5</th>
<th>20X4</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>$50,000</td>
<td>$(300,000)</td>
</tr>
<tr>
<td>b.</td>
<td>$0</td>
<td>$50,000</td>
</tr>
<tr>
<td>c.</td>
<td>$350,000</td>
<td>$(300,000)</td>
</tr>
<tr>
<td>d.</td>
<td>$(150,000)</td>
<td>$200,000</td>
</tr>
</tbody>
</table>
CHANGES IN ACCOUNTING PRINCIPLES-NORMAL CHANGE

11. On August 31, 20X9, Harvey Co. decided to change from the FIFO periodic inventory system to the weighted average periodic inventory system. Harvey is on a calendar year basis. The cumulative effect of the change is determined
   a. As of January 1, 20X9.
   b. As of August 31, 20X9.
   c. During the eight months ending August 31, 20X9, by a weighted average of the purchases.
   d. During 20X9 by a weighted average of the purchases.

12. On December 31, 20X6, Kerr, Inc., appropriately changed its inventory valuation method to FIFO cost from weighted-average cost for financial statement and income tax purposes. The change will result in a $700,000 increase in the beginning inventory at January 1, 20X6. Assume a 30% income tax rate. The cumulative effect of this accounting change reported as an adjustment to the January 1, 20X6, retained earnings balance is
   a. $0
   b. $210,000
   c. $490,000
   d. $700,000

13. On January 1, 20X2, Pell Corp. purchased a machine having an estimated useful life of 10 years and no salvage. The machine was depreciated by the double declining balance method for both financial statement and income tax reporting. On January 1, 20X7, Pell changed to the straight-line method for financial statement reporting but not for income tax reporting. Accumulated depreciation at December 31, 20X6, was $560,000. If the straight-line method had been used, the accumulated depreciation at December 31, 20X6, would have been $420,000. Pell's enacted income tax rate for 20X7 and thereafter is 30%. The amount shown for the retrospective cumulative effect on the January 1, 20X7, retained earnings balance of changing to the straight-line method should be
   a. $98,000 debit.
   b. $98,000 credit.
   c. $140,000 credit.
   d. $0.

14. Goddard has used the FIFO method of inventory valuation since it began operations in 20X4. Goddard decided to change to the weighted-average method for determining inventory costs at the beginning of 20X7. The following schedule shows year-end inventory balances under the FIFO and weighted-average methods:

<table>
<thead>
<tr>
<th>Year</th>
<th>FIFO</th>
<th>Weighted average</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X4</td>
<td>$45,000</td>
<td>$54,000</td>
</tr>
<tr>
<td>20X5</td>
<td>78,000</td>
<td>71,000</td>
</tr>
<tr>
<td>20X6</td>
<td>83,000</td>
<td>78,000</td>
</tr>
</tbody>
</table>

What amount, before income taxes, should be reported as an adjustment to the January 1, 20X7, retained earnings balance for the cumulative effect of the change in accounting principle?
   a. $5,000 decrease.
   b. $3,000 decrease.
   c. $2,000 increase.
   d. $0.

15. On January 1, 20X7, Poe Construction, Inc., changed to the percentage-of-completion method of income recognition for financial statement reporting but not for income tax reporting. Poe can justify this change in accounting principle. As of December 31, 20X6, Poe compiled data showing that income under the completed-contract method aggregated $700,000. If the percentage-of-completion method had been used, the accumulated income through December 31, 20X6, would have been $880,000. Assuming an income tax rate of 40% for all years, the cumulative effect of this accounting change should be reported by Poe in the 20X7
   a. Retained earnings statement as a $180,000 credit adjustment to the beginning balance.
   b. Income statement as a $180,000 credit.
   c. Retained earnings statement as a $108,000 credit adjustment to the beginning balance.
   d. Income statement as a $108,000 credit.
16. Milton Co. began operations on January 1, 20X6. On January 1, 20X8, Milton changed its inventory method from LIFO to FIFO for both financial and income tax reporting. If FIFO had been used in prior years, Milton’s inventories would have been higher by $60,000 and $40,000 at December 31, 20X8 and 20X7, respectively. Milton has a 30% income tax rate. What amount should Milton report as an adjustment to the January 1, 20X8, retained earnings from the retrospective application of the change in accounting principle?  
   a. $0  
   b. $14,000  
   c. $28,000  
   d. $42,000

17. The normal approach in accounting for a change in accounting principle is the retrospective application method. Which of the following changes is the exception to that approach?  
   a. Straight-line method of depreciation for previously recorded assets to the sum-of-the-years'-digits method.  
   b. LIFO method of inventory pricing to the FIFO method.  
   c. Percentage-of-completion method of accounting for long-term construction-type contracts to the completed-contract method.  
   d. Cash basis of accounting for vacation pay to the accrual basis.

18. Is the cumulative effect of an inventory pricing change on prior years earnings reported separately between extraordinary items and net income for a change from  
   
   \[
   \begin{array}{ll}
   \text{LIFO to} & \text{FIFO to} \\
   \text{weighted average?} & \text{weighted average?} \\
   \text{a. Yes} & \text{Yes} \\
   \text{b. Yes} & \text{No} \\
   \text{c. No} & \text{No} \\
   \text{d. No} & \text{Yes} \\
   \end{array}
   \]
   
19. When a company changes the expected service life of an asset because additional information has been obtained, which of the following should be reported?  
   
   \[
   \begin{array}{ll}
   \text{Pro forma effect} & \text{Cumulative effect} \\
   \text{of retroactive} & \text{of a change in} \\
   \text{application} & \text{accounting principle} \\
   \text{a. Yes} & \text{Yes} \\
   \text{b. No} & \text{Yes} \\
   \text{c. Yes} & \text{No} \\
   \text{d. No} & \text{No} \\
   \end{array}
   \]

20. During 20X9, Krey Co. increased the estimated quantity of copper recoverable from its mine. Krey uses the units of production depletion method. As a result of the change, which of the following should be reported in Krey’s 20X9 financial statements?  
   
   \[
   \begin{array}{ll}
   \text{Cumulative effect} & \text{Pro forma effects} \\
   \text{of a change in} & \text{of retroactive} \\
   \text{accounting} & \text{application of new} \\
   \text{principle} & \text{depletion base} \\
   \text{a. Yes} & \text{Yes} \\
   \text{b. Yes} & \text{No} \\
   \text{c. No} & \text{No} \\
   \text{d. No} & \text{Yes} \\
   \end{array}
   \]

21. On January 1, 20X3, Lane, Inc., acquired equipment for $100,000 with an estimated 10-year useful life. Lane estimated a $10,000 salvage value and used the straight-line method of depreciation. During 20X7, after its 20X6 financial statements had been issued, Lane determined that, due to obsolescence, this equipment’s remaining useful life was only four more years and its salvage value would be $4,000. In Lane’s December 31, 20X7, balance sheet, what was the carrying amount of this asset?  
   
   a. $51,500  
   b. $49,000  
   c. $41,500  
   d. $39,000
22. For 20X8, Pac Co. estimated its two-year equipment warranty costs based on $100 per unit sold in 20X8. Experience during 20X9 indicated that the estimate should have been based on $110 per unit. The effect of this $10 difference from the estimate is reported
   a. In 20X9 income from continuing operations.
   b. As an accounting change, net of tax, below 20X9 income from continuing operations.
   c. As an accounting change requiring 20X8 financial statements to be restated.
   d. As a correction of an error requiring 20X8 financial statements to be restated.

**CHANGES IN REPORTING ENTITY**

23. Presenting consolidated financial statements this year when statements of individual companies were presented last year is
   b. An accounting change that should be reported prospectively.
   c. An accounting change that should be reported by restating the financial statements of all prior periods presented.
   d. Not an accounting change.

24. Matt Co. included a foreign subsidiary in its 20X8 consolidated financial statements. The subsidiary was acquired in 20X2 and was excluded from previous consolidations. The change was caused by the elimination of foreign exchange controls. Including the subsidiary in the 20X8 consolidated financial statements results in an accounting change that should be reported
   a. By footnote disclosure only.
   b. Currently and prospectively.
   c. Currently with footnote disclosure of pro forma effects of retroactive application.
   d. By restating the financial statements of all prior periods presented.

25. A change in accounting entity is actually a change in accounting
   a. Principle.
   b. Estimate.
   c. Method.
   d. Concept.

**EXTRAORDINARY ITEMS**

26. A gain or loss from a transaction that is unusual in nature and infrequent in occurrence should be reported separately as a component of income
   a. Before net income and after discontinued operations of a segment of a business.
   b. After cumulative effect of accounting changes and after discontinued operations of a segment of a business.
   c. Before cumulative effect of accounting changes and before discontinued operations of a segment of a business.
   d. After cumulative effect of accounting changes and before discontinued operations of a segment of a business.

27. An extraordinary item should be reported separately on the income statement as a component of income

<table>
<thead>
<tr>
<th>Before discontinued operations of a segment of a business</th>
<th>Net of income taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

28. On July 1, 20X2, Dolan Corp. incurred an extraordinary loss of $300,000, net of income tax saving. Dolan's operating income for the full year ending December 31, 20X2, was expected to be $500,000. In Dolan's income statement for the quarter ended September 30, 20X2, how much of this extraordinary loss should be disclosed separately?
   a. $300,000
   b. $150,000
   c. $75,000
   d. $0

29. On March 1, 20X4, Somar Co. issued 20-year bonds at a discount. By September 1, 20X9, the bonds were quoted at 106 when Somar exercised its right to retire the bonds at 105. How should Somar report the bond retirement on its 20X9 income statement?
   a. A gain in continuing operations.
   b. A loss in continuing operations.
   c. An extraordinary gain.
   d. An extraordinary loss.
30. Midway Co. had the following transactions during 20X9:

- $1,200,000 pretax loss on foreign currency exchange due to a major unexpected devaluation by the foreign government.
- $500,000 pretax loss from discontinued operations of a division.
- $800,000 pretax loss on equipment damaged by a hurricane. This was the first hurricane ever to strike in Midway’s area. Midway also received $1,000,000 from its insurance company to replace a building, with a carrying value of $300,000, that had been destroyed by the hurricane.

What amount should Midway report in its 20X9 income statement as extraordinary loss before income taxes?

a. $100,000  
b. $1,300,000  
c. $1,800,000  
d. $2,500,000

31. The effect of a transaction that is infrequent in occurrence but not unusual in nature should be presented separately as a component of income from continuing operations when the transaction results in a

<table>
<thead>
<tr>
<th>Loss</th>
<th>Gain</th>
</tr>
</thead>
</table>
a. Yes | Yes  |
b. No  | Yes  |
c. No  | No   |
d. Yes | No   |

PRIOR PERIOD ADJUSTMENTS

32. Conn Co. reported a retained earnings balance of $400,000 at December 31, 20X8. In August 20X9, Conn determined that insurance premiums of $60,000 for the three-year period beginning January 1, 20X8, had been paid and fully expensed in 20X8. Conn has a 30% income tax rate. What amount should Conn report as adjusted beginning retained earnings in its 20X9 statement of retained earnings?

a. $420,000.  
b. $428,000.  
c. $440,000.  
d. $442,000.

33. Foy Corp. failed to accrue warranty costs of $50,000 in its December 31, 20X4, financial statements. In addition, a change from straight-line to accelerated depreciation made at the beginning of 20X5 resulted in a cumulative effect of $30,000 on Foy’s retained earnings. Both the $50,000 and the $30,000 are net of related income taxes. What amount should Foy report as prior period adjustment in 20X5?

a. $0  
b. $30,000  
c. $50,000  
d. $80,000

34. Which of the following should be reported as a prior period adjustment?

<table>
<thead>
<tr>
<th>Change in estimated lives</th>
<th>Change from unaccepted principle</th>
</tr>
</thead>
</table>
a. Yes | Yes  |
b. No  | Yes  |
c. Yes | No   |
d. No  | No   |

DISCLOSURE OF ACCOUNTING POLICIES

35. The stock of Gates, Inc., is widely held, and the company is under the jurisdiction of the Securities and Exchange Commission. In the annual report, information about the significant accounting policies adopted by Gates should be

a. Omitted because it tends to confuse users of the report.  
b. Included as an integral part of the financial statements.  
c. Presented as supplementary information.  
d. Omitted because all policies must comply with the regulations of the Securities and Exchange Commission.

36. Which of the following should be disclosed in the summary of significant accounting policies?

<table>
<thead>
<tr>
<th>Composition of inventories</th>
<th>Maturity dates of long-term debt</th>
</tr>
</thead>
</table>
a. Yes | Yes  |
b. Yes | No   |
c. No  | No   |
d. No  | Yes  |
37. Which of the following should be disclosed in the summary of significant accounting policies?

<table>
<thead>
<tr>
<th>Composition of</th>
<th>Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>plant assets</td>
<td>pricing</td>
</tr>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

INTERIM FINANCIAL REPORTING

38. For interim financial reporting, an extraordinary gain occurring in the second quarter should be
a. Recognized ratably over the last three quarters.
b. Recognized ratably over all four quarters with the first quarter being restated.
c. Recognized in the second quarter.
d. Disclosed by footnote only in the second quarter.

39. Which of the following reporting practices is permissible for interim financial reporting?
a. Use of the gross-profit method for interim inventory pricing.
b. Use of the direct-costing method for determining manufacturing inventories.
c. Deferral of unplanned variances under a standard-cost system until year end.
d. Deferral of inventory market declines until year end.

40. Farr Corp. had the following transactions during the quarter ended March 31, 20X7:
- Loss from rare earthquake $ 70,000
- Payment of fire insurance premium for calendar year 20X7 100,000

What amount should be included in Farr's income statement for the quarter ended March 31, 20X7?

<table>
<thead>
<tr>
<th>Extraordinary loss</th>
<th>Insurance expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $70,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>b. $70,000</td>
<td>$25,000</td>
</tr>
<tr>
<td>c. $17,500</td>
<td>$25,000</td>
</tr>
<tr>
<td>d. $0</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

41. For interim financial reporting, a company's income tax provision for the second quarter of 20X9 should be determined using the
a. Effective tax rate expected to be applicable for the full year of 20X9 as estimated at the end of the first quarter of 20X9.
b. Effective tax rate expected to be applicable for the full year of 20X9 as estimated at the end of the second quarter of 20X9.
c. Effective tax rate expected to be applicable for the second quarter of 20X9.

42. During the first quarter of 20X4, Tech Co. had income before taxes of $200,000, and its effective income tax rate was 15%. Tech’s 20X3 effective annual income tax rate was 30%, but Tech expects its 20X4 effective annual income tax rate to be 25%. In its first quarter interim income statement, what amount of income tax expense should Tech report?

a. $0  
b. $30,000  
c. $50,000  
d. $60,000

43. An inventory loss from a market price decline occurred in the first quarter, and the decline was not expected to reverse during the fiscal year. However, in the third quarter the inventory’s market price recovery exceeded the market decline that occurred in the first quarter. For interim financial reporting, the dollar amount of net inventory should
a. Decrease in the first quarter by the amount of the market price decline and increase in the third quarter by the amount of the decrease in the first quarter.
b. Decrease in the first quarter by the amount of the market price decline and increase in the third quarter by the amount of the market price recovery.
c. Decrease in the first quarter by the amount of the market price decline and not be affected in the third quarter.
d. Not be affected in either the first quarter or the third quarter.
44. Due to a decline in market price in the second quarter, Petal Co. incurred an inventory loss. The market price is expected to return to previous levels by the end of the year. At the end of the year the decline had not reversed. When should the loss be reported in Petal’s interim income statements?
   a. Ratably over the second, third, and fourth quarters.
   b. Ratably over the third and fourth quarters.
   c. In the second quarter only.
   d. In the fourth quarter only.

**TROUBLED DEBT RESTRUCTURING**

45. Colt, Inc., is indebted to Kent under an $800,000, 10%, four-year note dated December 31, 20X2. Annual interest of $80,000 was paid on December 31, 20X3 and 20X4. During 20X5 Colt experienced financial difficulties and is likely to default unless concessions are made. On December 31, 20X5, Kent agreed to restructure the debt as follows:
   - Interest of $80,000 for 20X5, due December 31, 20X5, was made payable December 31, 20X6.
   - Interest for 20X6 was waived.
   - The principal amount was reduced to $700,000.

Assuming an income tax rate of 40%, how much should Colt report as ordinary gain in its income statement for the year ended December 31, 20X5?
   a. $0
   b. $60,000
   c. $100,000
   d. $108,000

46. During 20X4 Peterson Company experienced financial difficulties and is likely to default on a $500,000, 15%, three-year note dated January 1, 20X2, payable to Forest National Bank. On December 31, 20X4, the bank agreed to settle the note and unpaid interest of $75,000 for 20X4 for $50,000 cash and marketable securities having a current market value of $375,000. Peterson's acquisition cost of the securities is $385,000. Ignoring income taxes, what amount should Peterson report as a gain from the debt restructuring in its 20X4 income statement?
   a. $65,000.
   b. $75,000.
   c. $140,000.
   d. $150,000.

47. Wood Corp., a debtor-in-possession under Chapter 11 of the Federal Bankruptcy Code, granted an equity interest to a creditor in full settlement of a $28,000 debt owed to the creditor. At the date of this transaction, the equity interest had a fair value of $25,000. What amount should Wood recognize as an ordinary gain on restructuring of debt?
   a. $0
   b. $3,000
   c. $25,000
   d. $28,000

48. On October 15, 20X5, Kam Corp. informed Finn Co. that Kam would be unable to repay its $100,000 note due on October 31 to Finn. Finn agreed to accept title to Kam’s computer equipment in full settlement of the note. The equipment’s carrying value was $80,000 and its fair value was $75,000. Kam’s tax rate is 30%. What amounts should Kam report as ordinary gain (loss) and extraordinary gain for the year ended September 30, 20X6?

<table>
<thead>
<tr>
<th>Ordinary gain (loss)</th>
<th>Extraordinary gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $(5,000)</td>
<td>$17,500</td>
</tr>
<tr>
<td>b. $0</td>
<td>$20,000</td>
</tr>
<tr>
<td>c. $0</td>
<td>$14,000</td>
</tr>
<tr>
<td>d. $20,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

**DEVELOPMENT STAGE ENTERPRISES**

49. A development stage enterprise
   a. Issues an income statement that shows only cumulative amounts from the enterprise's inception.
   b. Issues an income statement that is the same as an established operating enterprise, but does not show cumulative amounts from the enterprise's inception as additional information.
   c. Issues an income statement that is the same as an established operating enterprise, and shows cumulative amounts from the enterprise's inception as additional information.
   d. Does not issue an income statement.

50. A development stage enterprise should use the same generally accepted accounting principles that apply to established operating enterprises for

<table>
<thead>
<tr>
<th>Expensing of costs</th>
<th>Deferral of costs</th>
<th>when incurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>c.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>d.</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
51. Deficits accumulated during the development stage of a company should be
   a. Reported as organization costs.
   b. Reported as a part of stockholders' equity.
   c. Capitalized and written off in the first year of principal operations.
   d. Capitalized and amortized over a five-year period beginning when principal operations commence.

52. Tanker Oil Co., a developmental stage enterprise, incurred the following costs during its first year of operations:

   Legal fees for incorporation and other related matters $55,000
   Underwriters' fees for initial stock offering 40,000
   Explorations costs and purchases of mineral rights 60,000

Tanker had no revenue during its first year of operation. What amount may Tanker consider as organizational costs?
   a. $155,000
   b. $115,000
   c. $95,000
   d. $55,000

REVIEW QUESTIONS

53. Pear Co.'s income statement for the year ended December 31, 20X5, as prepared by Pear's controller, reported income before taxes of $125,000. The auditor questioned the following amounts that had been included before taxes:

   Equity in earnings of Cinn Co. $40,000
   Dividends received from Cinn 8,000
   Adjustments to profits of prior years for arithmetical errors in depreciation (35,000)

Pear owns 40% of Cinn's common stock. Pear's December 31, 20X5, income statement should report income before taxes of
   a. $85,000
   b. $117,000
   c. $120,000
   d. $152,000

54. In its 20X1 financial statements, what amount should Orca report as the cumulative effect of this accounting change?
   a. $2,800
   b. $4,000
   c. $4,200
   d. $6,000

55. Orca should report the cumulative effect of this accounting change as a(an)
   a. Prior period adjustment.
   b. By retrospective application to previously issued financial statements.
   c. Extraordinary item.
   d. Component of income after extraordinary items.

56. Conceptually, interim financial statements can be described as emphasizing
   a. Timeliness over reliability.
   b. Reliability over relevance.
   c. Relevance over comparability.
   d. Comparability over neutrality.

57. Which of the following information should be disclosed in the summary of significant accounting policies?
   a. Refinancing of debt subsequent to the balance sheet date.
   b. Guarantees of indebtedness of others.
   c. Criteria for determining which investments are treated as cash equivalents.
   d. Adequacy of pension plan assets relative to vested benefits.

58. In Yew Co.'s 20X5 annual report, Yew described its social awareness expenditures during the year as follows:

   "The Company contributed $250,000 in cash to youth and educational programs. The Company also gave $140,000 to health and human-service organizations, of which $80,000 was contributed by employees through payroll deductions. In addition, consistent with the Company's commitment to the environment, the Company spent $100,000 to redesign product packaging."
What amount of the above should be included in Yew's income statement as charitable contributions expense?

a. $310,000.
b. $390,000.
c. $410,000.
d. $490,000.

59. Which of the following should be included in general and administrative expenses?

<table>
<thead>
<tr>
<th>Interest</th>
<th>Advertising</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

60. In open market transactions, Gold Corp. simultaneously sold its long-term investment in Iron Corp. bonds and purchased its own outstanding bonds. The broker remitted the net cash from the two transactions. Gold's gain on the purchase of its own bonds exceeded its loss on the sale of the Iron bonds. Gold should report the

a. Net effect of the two transactions as an extraordinary gain.
b. Net effect of the two transactions in income before extraordinary items.
c. Effect of its own bond transaction gain in income before extraordinary items, and report the Iron bond transaction as an extraordinary loss.
d. Effect of its own bond transaction as an ordinary gain, and report the Iron bond transaction loss in income before extraordinary items.

61. Lore Co. changed from the cash basis of accounting to the accrual basis of accounting during 20X1. The cumulative effect of this change should be reported in Lore's 20X1 financial statements as a

a. Prior-period adjustment resulting from the correction of an error.
b. Prior-period adjustment resulting from the change in accounting principle.
c. Component of income before extraordinary item.
d. Component of income after extraordinary item.

62. Grey Company holds an overdue note receivable of $800,000 plus recorded accrued interest of $64,000. As the result of a court imposed settlement on December 31, 20X3, Grey agreed to the following restructuring arrangement:

- Reduced the principal obligation to $600,000.
- Forfought the $64,000 accrued interest.
- Extended the maturity date to December 31, 20X5.
- Annual interest of $60,000 is to be paid to Grey on December 31, 20X4 and 20X5.

On December 31, 20X3, Grey must recognize a loss from restructuring of

a. $144,000
b. $200,000
c. $204,000
d. $264,000

63. On January 2, 20X9, to better reflect the variable use of its only machine, Holly, Inc. elected to change its method of depreciation from the straight-line method to the units-of-production method. The original cost of the machine on January 2, 20X7, was $50,000, and its estimated life was 10 years. Holly estimates that the machine's total life is 50,000 machine hours.

Machine hours usage was 8,500 during 20X8 and 3,500 during 20X7.

Holly's income tax rate is 30%. Holly should report the accounting change in its 20X9 financial statements as a(an)

a. Change in accounting estimate accounted for prospectively [affecting current (20X9) and future years only].
b. Adjustment to beginning retained earnings of $2,000.
c. Cumulative effect of a change in accounting principle of $1,400 in its income statement.
d. Adjustment to beginning retained earnings of $1,400.

64. On January 2, 20X6, Union Co. purchased a machine for $264,000 and depreciated it by the straight-line method using an estimated useful life of eight years with no salvage value. On January 2, 20X9, Union determined that the machine had a useful life of six years from the date of acquisition and will have a salvage value of $24,000. An accounting change was made in 20X9 to reflect the additional data. The accumulated depreciation for this machine should have a balance at December 31, 20X9, of

a. $176,000.
b. $160,000.
c. $154,000.
d. $146,000.
65. Which of the following facts concerning fixed assets should be included in the summary of significant accounting policies?

<table>
<thead>
<tr>
<th>Depreciation method</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>No</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

66. An Accounting Principles Board Opinion is concerned with disclosure of accounting policies. A singular feature of this particular opinion is that it
a. Calls for disclosure of every accounting policy followed by a reporting entity.
   b. Applies to immaterial items whereas most opinions are concerned solely with material items.
   c. Applies also to accounting policy disclosures by not-for-profit entities, whereas most opinions are concerned solely with accounting practices of profit-oriented entities.
   d. Prescribes a rigid format for the disclosure of policies to be reported upon.

67. The first examination of Rudd Corp.'s financial statements was made for the year ended December 31, 20X5. The auditor found that Rudd had purchased another company in January 20X3 and had recorded a patent of $100,000 in connection with this purchase. It was determined that the patent had an estimated useful life of only five years because of obsolescence. No amortization of patent had ever been recorded. For the December 31, 20X5, financial statements, Rudd should debit

<table>
<thead>
<tr>
<th>Amortization expense</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $0</td>
<td>$100,000</td>
</tr>
<tr>
<td>b. $20,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>c. $33,333</td>
<td>$0</td>
</tr>
<tr>
<td>d. $60,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

68. In 20X2, May Corp. acquired land by paying $75,000 down and signing a note with a maturity value of $1,000,000. On the note’s due date, December 31, 20X7, May owed $40,000 of accrued interest and $1,000,000 principal on the note. May was in financial difficulty and was unable to make any payments. May and the bank agreed to amend the note as follows:

- The $40,000 of interest due on December 31, 20X7, was forgiven.
- The principal of the note was reduced from $1,000,000 to $950,000 and the maturity date extended 1 year to December 31, 20X8.
- May would be required to make one interest payment totaling $30,000 on December 31, 20X8.

69. Under East Co.'s accounting system, all insurance premiums paid are debited to prepaid insurance. For interim financial reports, East makes monthly estimated charges to insurance expense with credits to prepaid insurance. Additional information for the year ended December 31, 20X7, is as follows:

| Prepaid insurance at December 31, 20X6 | $105,000 |
| Charges to insurance expense during 20X7 (including a year-end adjustment of $17,500) | 437,500 |
| Prepaid insurance at December 31, 20X7 | 122,500 |

What was the total amount of insurance premiums paid by East during 20X7?

a. $332,500
b. $420,000
c. $437,500
d. $455,000

70. Vilo Corp. has estimated that total depreciation expense for the year ending December 31, 20X6, will amount to $60,000, and that 20X6 year-end bonuses to employees will total $120,000. In Vilo's interim income statement for the six months ended June 30, 20X6, what is the total amount of expense relating to these two items that should be reported?

a. $0
b. $30,000
c. $90,000
d. $180,000
71. On March 15, 20X4, Rex Company paid property taxes of $180,000 on its factory building for calendar year 20X4. On April 1, 20X4, Rex made $300,000 in unanticipated repairs to its plant equipment. The repairs will benefit operations for the remainder of the calendar year. What total amount of these expenses should be included in Rex's quarterly income statement for the three months ended June 30, 20X4?
   a. $75,000
   b. $145,000
   c. $195,000
   d. $345,000

72. The summary of significant accounting policies should disclose the
   a. Pro forma effect of retroactive application of an accounting change.
   b. Basis of profit recognition on long-term construction contracts.
   c. Adequacy of pension plan assets in relation to vested benefits.
   d. Future minimum lease payments in the aggregate and for each of the five succeeding fiscal years.

73. Kent Co. incurred the following infrequent losses during 20X8:
   • A $300,000 loss was incurred on disposal of one of four dissimilar factories.
   • A major currency devaluation caused a $120,000 exchange loss on an amount remitted by a foreign customer.
   • Inventory valued at $190,000 was made worthless by a competitor’s unexpected production innovation.

   In its 20X8 income statement, what amount should Kent report as losses that are not considered extraordinary?
   a. $610,000
   b. $490,000
   c. $420,000
   d. $310,000

74. Bolte Corp. had the following infrequent gains during 20X6:
   • $210,000 on reacquisition and retirement of bonds.
   • $75,000 on repayment at maturity of a long-term note denominated in a foreign currency.
   • $240,000 on sale of a plant facility (Bolte continues similar operations at another location.)

   In its 20X6 income statement, what amount should Bolte report as total infrequent gains which are not considered extraordinary?
   a. $450,000
   b. $315,000
   c. $285,000
   d. $525,000

75. A change in the periods benefited by a deferred cost because additional information has been obtained is
   b. An accounting change that should be reported by restating the financial statements of all prior periods presented.
   c. An accounting change that should be reported in the period of change and future periods if the change affects both.
   d. Not an accounting change.

---

Items 76 and 77 are based on the following:

On January 1, 20X7, Warren Co. purchased a $600,000 machine, with a five-year useful life and no salvage value. The machine was depreciated by an accelerated method for book and tax purposes. The machine’s carrying amount was $240,000 on December 31, 20X8. On January 1, 20X9, Warren changed retroactively to the straight-line method for financial statement purposes. Warren can justify the change. Warren’s income tax rate is 30%.

76. In its 20X9 income statement, what amount should Warren report as the cumulative effect of this change?
   a. $120,000
   b. $84,000
   c. $36,000
   d. $0

---

12Q-12
77. On January 1, 20X9, what amount should Warren report as deferred income tax liability as a result of the change?
   a. $120,000  
   b. $72,000  
   c. $36,000  
   d. $0

78. Lex Corp. was a development stage enterprise from October 10, 20X4, (inception) to December 31, 20X5. The year ended December 31, 20X6, is the first year in which Lex is an established operating enterprise. The following are among the costs incurred by Lex:

<table>
<thead>
<tr>
<th>For the period</th>
<th>For the year ended</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/10/X4</td>
<td>12/31/X5</td>
</tr>
<tr>
<td>Leasehold improvements, equipment, and furniture</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Security deposits</td>
<td>60,000</td>
</tr>
<tr>
<td>Research and development</td>
<td>750,000</td>
</tr>
<tr>
<td>Laboratory operations</td>
<td>175,000</td>
</tr>
<tr>
<td>General and administrative</td>
<td>225,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>25,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$2,235,000</strong></td>
</tr>
</tbody>
</table>

From its inception through the period ended December 31, 20X6, what is the total amount of costs incurred by Lex that should be charged to operations?
   a. $3,425,000  
   b. $2,250,000  
   c. $1,175,000  
   d. $1,350,000

79. Financial reporting by a development stage enterprise differs from financial reporting for an established operating enterprise in regard to footnote disclosures
   a. Only.  
   b. And expense recognition principles only.  
   c. And revenue recognition principles only.  
   d. And revenue and expense recognition principles.

80. Which of the following statements is correct regarding accounting changes that result in financial statements that are, in effect, the statements of a different reporting entity?
   a. Cumulative-effect adjustments should be reported as separate items on the financial statements pertaining to the year of change.  
   b. No restatements or adjustments are required if the changes involve consolidated methods of accounting for subsidiaries.  
   c. No restatements or adjustments are required if the changes involve the cost or equity methods of accounting for investments.  
   d. The financial statements of all prior periods presented should be restated.

81. On April 30, 20X6, Carty Corp. approved a plan to dispose of a segment of its business. The estimated disposal loss is $480,000, including severance pay of $55,000 and employee relocation costs of $25,000, both of which are directly associated with the decision to dispose of the segment. Also included is the segment's estimated operating loss of $100,000 for the period from May 1, 20X6, to the disposal date. A $120,000 operating loss from January 1, 20X6, to April 30, 20X6, is not included in the estimated disposal loss of $480,000. Before income taxes, what amount should be reported in Carty’s income statement for the year ended December 31, 20X6, as the loss from discontinued operations?
   a. $600,000  
   b. $480,000  
   c. $455,000  
   d. $425,000

82. The following items were among those that were reported on Lee Co.’s income statement for the year ended December 31, 20X6:
   Legal and audit fees $170,000
   Rent for office space 240,000
   Interest on inventory floorplan 210,000
   Loss on abandoned data processing equipment used in operations 35,000
The office space is used equally by Lee's sales and accounting departments. What amount of the above-listed items should be classified as general and administrative expenses in Lee's multiple-step income statement?

- $290,000
- $325,000
- $410,000
- $500,000

83. How should the effect of a change in accounting principle that is inseparable from the effect of a change in accounting estimate be reported?

- As a component of income from continuing operations.
- By restating the financial statements of all prior periods presented.
- As a correction of an error.
- By footnote disclosure only.

84. In September 20X6, Koff Co.’s operating plant was destroyed by an earthquake. Earthquakes are rare in the area in which the plant was located. The portion of the resultant loss not covered by insurance was $700,000. Koff’s income tax rate for 20X6 is 40%. In its 20X6 income statement, what amount should Koff report as extraordinary loss?

- $0
- $280,000
- $420,000
- $700,000

85. When a full set of general-purpose financial statements is presented, comprehensive income and its components should

- Appear as a part of discontinued operations, extraordinary items, and cumulative effect of a change in accounting principle.
- Be reported net of related income tax effect, in total and individually.
- Appear in a supplemental schedule in the notes to financial statements.
- Be displayed in a financial statement that has the same prominence as other financial statements.

86. Retrospective application of a change in accounting principle is impracticable when

I. The costs of applying the new principle to prior period financial statements are material.
II. The entity cannot apply the new principle after making every reasonable effort.

- I only
- II only
- Both I and II
- Neither I nor II

87. In January 20X8 Off-Line changed its method of accounting for demo costs from writing off the costs over two years to expensing the costs immediately. Off-Line made the change in recognition of an increasing number of demos placed with customers that did not result in sales. Off-Line had deferred demo costs of $500,000 at December 31, 20X7, $300,000 of which were to be written off in 20X8 and the remainder in 20X9. Off-Line’s income tax rate is 30% in its 20X8 income statement. In its 20X8 statement of retained earnings, what amount should Off-Line report for the cumulative effect of the retrospective application of the change in accounting principle on its January 1, 20X8, retained earnings?

- $140,000
- $0
- $350,000
- $500,000

88. Casey Corporation entered into a troubled-debt restructuring agreement with First State Bank. First State agreed to accept land with a carrying amount of $85,000 and a fair value of $120,000 in exchange for a note with a carrying amount of $185,000. Disregarding income taxes, what amount should Casey report as ordinary gain in its income statement?

- $0
- $35,000
- $65,000
- $100,000

12Q-14
89. Wilson Corp. experienced a $50,000 decline in the market value of its inventory in the first quarter of its fiscal year. Wilson had expected this decline to reverse in the third quarter, and in fact, the third quarter recovery exceeded the previous decline by $10,000. Wilson’s inventory did not experience any other declines in market value during the fiscal year. What amounts of loss and/or gain should Wilson report in its interim financial statements for the first and third quarters?

<table>
<thead>
<tr>
<th>First quarter</th>
<th>Third quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $0</td>
<td>$0</td>
</tr>
<tr>
<td>b. $0</td>
<td>$10,000 gain</td>
</tr>
<tr>
<td>c. $50,000 loss</td>
<td>$50,000 gain</td>
</tr>
<tr>
<td>d. $50,000 loss</td>
<td>$60,000 gain</td>
</tr>
</tbody>
</table>

90. On February 2, Flint Corp’s Board of Directors committed to plan to sell its frozen food component and to sell the component’s assets on the open market as soon as possible. As a result, the component’s operations and cash flows will be eliminated from the entity’s operations and the entity will have no significant continuing post-disposal involvement in the component’s operations. The division reported net operating losses of $20,000 in January and $30,000 in February. On February 26, sale of the division’s assets resulted in a gain of $90,000. What amount of gain from disposal of a component should Flint reorganize in its income statement for the three months ended March 31?

a. $0  
b. $40,000  
c. $60,000  
d. $90,000

91. Ace Corporation entered into a troubled-debt restructuring agreement with National Bank. National agreed to accept land with a carrying amount of $75,000 and a fair value of $100,000 in exchange for a note with a carrying amount of $150,000. Disregarding income taxes, what amount should Ace report as gain in its income statement?

a. $0  
b. $25,000  
c. $50,000  
d. $75,000

92. For a troubled debt restructuring involving only a modification of terms, which of the following items specified by the new terms would be compared to the carrying amount of the debt to determine if the debtor should report a gain on restructuring?

a. The total future cash payments  
b. The present value of the debt at the original interest rate  
c. The present value of the debt at the modified interest rate  
d. The amount of future cash payments designated as principal repayments

93. Rock Co.’s financial statements had the following balances at December 31:

- Extraordinary gain: $50,000  
- Foreign currency translation gain: 100,000  
- Net income: 400,000  
- Unrealized gain on available-for-sale equity securities: 20,000

What amount should Rock report as comprehensive income for the year ended December 31?

a. $400,000  
b. $420,000  
c. $520,000  
d. $570,000

94. Which of the following items requires a prior period adjustment to retained earnings?

a. Purchases of inventory this year were overstated by $5 million.  
b. Available-for-sale securities were improperly valued last year by $20 millions.  
c. Revenue of $5 million that should have been deferred was recorded in the previous year as earned.  
d. The prior year’s foreign currency translation gain of $2 million was never recorded.

95. During December 2000, Nile Co. incurred special insurance costs but did not record these costs until payment was made during 2001. These insurance costs related to inventory that had been sold by December 31, 2000. What is the effect of the omission on Nile’s accrued liabilities and retained earnings at December 31, 2000?

<table>
<thead>
<tr>
<th>Accrued liabilities</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No effect</td>
<td>No effect</td>
</tr>
<tr>
<td>b. No effect</td>
<td>Overstated</td>
</tr>
<tr>
<td>c. Understated</td>
<td>Overstated</td>
</tr>
<tr>
<td>d. Understated</td>
<td>No effect</td>
</tr>
</tbody>
</table>
96. Which of the following would be reported in the income statement of a proprietorship?

<table>
<thead>
<tr>
<th>Proprietor's draw</th>
<th>Depreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

Recently Disclosed Questions

97. Which of the following should be disclosed in a summary of significant accounting policies?
   a. Basis of profit recognition on long-term construction contracts.
   b. Future minimum lease payments in the aggregate and for each of the five succeeding fiscal years.
   c. Depreciation expense.
   d. Composition of sales by segment.

98. Which of the following must be included in a company’s summary of significant accounting policies in the notes of the financial statements?
   a. Description of current year equity transactions.
   b. Summary of long-term debt outstanding.
   c. Schedule of fixed assets.
   d. Revenue recognition policies.

99. Which of the following is correct concerning financial statement disclosure of accounting policies?
   a. Disclosures should be limited to principles and methods peculiar to the industry in which the company operates.
   b. Disclosure of accounting policies is an integral part of the financial statements.
   c. The format and location of accounting policy disclosures are fixed by generally accepted accounting principles.
   d. Disclosures should duplicate details disclosed elsewhere in the financial statements.

100. Miller Co. discovered that in the prior year, it failed to report $40,000 of depreciation related to a newly constructed building. The depreciation was computed correctly for tax purposes, the tax rate for the current year was 40%. What was the impact of the error on Miller’s financial statements for the prior year?
   a. Understatement of accumulated depreciation of $24,000.
   b. Understatement of accumulated depreciation of $40,000.
   c. Understatement of depreciation expense of $24,000.
   d. Understatement of net income of $24,000.

102. A corporation issues quarterly interim financial statements and uses the lower cost or market method to value its inventory in its annual financial statements. Which of the following statements is correct regarding how the corporation should value its inventory in its interim financial statements?
   a. Inventory losses generally should be recognized in the interim statements.
   b. Temporary market declines should be recognized in the interim statements.
   c. Only the cost method of valuation should be used.
   d. Gains from valuations in previous interim periods should be fully recognized.

103. Which of the following items is not classified as “other comprehensive income”?
   a. Extraordinary gains from extinguishment of debt.
   b. Foreign currency translation adjustments.
   c. Minimum pension liability equity adjustment for a defined-benefit pension plan.
   d. Unrealized gains for the year on available-for-sale marketable securities.

104. Which of the following statements is correct regarding reporting comprehensive income?
   a. Accumulated other comprehensive income is reported in the stockholders’ equity section of the balance sheet.
   b. A separate statement of comprehensive income is required.
   c. Comprehensive income must include all changes in stockholders’ equity for the period.
   d. Comprehensive income is reported in the year-end statements but not in the interim statements.

105. How should a company report its decision to change from a cash-basis of accounting to accrual-basis of accounting?
   a. As a change in accounting principle, requiring the cumulative effect of the change (net of tax) to be reported in the income statement.
   b. Prospectively, with no amounts restated and no cumulative adjustment.
   c. As an extraordinary item (net of tax).
   d. As a prior-period adjustment (net of tax), by adjusting the beginning balance of retained earnings.

106. Jordan Co. had the following gains during the
current period:

Gain on disposal of business segment $500,000
Foreign currency translation gain 100,000

What amount of extraordinary gain should be presented on Jordan's income statement for the current period?

a. $0
b. $100,000
c. $500,000
d. $600,000

107. A company reports the following information as of December 31:

Sales revenue $800,000
Cost of goods sold 600,000
Operating expenses 90,000
Unrealized holding gain on available-for-sale securities, net of tax 30,000

What amount should the company report as comprehensive income as of December 31?

a. $30,000
b. $110,000
c. $140,000
d. $200,000

IFRS

108. Which of the following items would not be shown on an IFRS Income Statement?

a. Distribution Expenses
b. Research and Development Expenses
c. Extraordinary items
d. Discontinued operations

109. Under IFRS, operating expenses may be classified by

<table>
<thead>
<tr>
<th>Function</th>
<th>Nature</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>No</td>
</tr>
<tr>
<td>d. Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

110. Under IFRS which of the following disclosure requirements are required for income statements?

a. Current year only
b. Current year and prior year
c. Three years Income statements are required
d. IFRS is flexible and does not have any particular requirements.

111. Which of the following formats does IFRS not allow for the presentation of comprehensive income?

a. Single combined statement of income and comprehensive income
b. Separate statements of income and comprehensive income
c. As part of the statement of stockholders’ equity
d. All of the above

112. Indemar International reports under IFRS and classifies its expenditures by nature. Which of the following expenditures would not be classified as a nature expense?

a. Research and Development expense?
b. Salaries Expense
c. Utilities Expense
d. Insurance Expense

113. The income statement format required by IFRS is

a. Single step format
b. Either single or multi-step format
c. Multi-step format
d. IFRS does not specify a specific income statement format

114. Under IFRS a change in accounting principle is reported

a. On a retroactive basis
b. On a prospective basis
c. As a cumulative adjustment on the income statement
d. On a retrospective basis
Chapter Twelve
Reporting the Results of Operations Problems

NUMBER 1

Number 1 consists of 8 items. Select the best answer for each item. **Items 1 through 8** are based on the following:

Pucket Corp. is in the process of preparing its financial statements for the year ended December 31, 20X5. Items 1 through 8 represent various transactions or situations that occurred during 20X5.

**Required:**

For items 1 through 8, select from the list of financial statement categories below the category in which the item should be presented. A financial statement category may be selected once, more than once, or not at all.

**Financial Statement Categories:**

a. Income from continuing operations, with no separate disclosure.
b. Income from continuing operations, with separate disclosure (either on the face of statement or in the notes).
c. Extraordinary items.
d. Separate component of stockholders’ equity.
e. None of the above categories include this item.

**Items to be answered:**

1. An increase in the unrealized excess of cost over market value of short-term marketable equity securities.
2. An increase in the unrealized excess of cost over market value of long-term marketable equity securities.
3. Income from a discontinued segment.
4. A gain on remeasuring a foreign subsidiary’s financial statements from the local currency into the functional currency.
5. A loss on translating a foreign subsidiary’s financial statements from the functional local currency into the reporting currency.
6. A loss caused by a major earthquake in an area previously considered to be subject to only minor tremors.
7. The probable receipt of $1,000,000 from a pending lawsuit.
8. The purchase of research and development services. There were no other research and development activities.
The Century Company, a diversified manufacturing company, had four separate operating divisions engaged in the manufacture of products in each of the following areas: food products, health aids, textiles, and office equipment.

Financial data for the two years ended December 31, 20X8 and 20X7 are presented below:

<table>
<thead>
<tr>
<th></th>
<th>20X8</th>
<th>20X7</th>
<th>20X8</th>
<th>20X7</th>
<th>20X8</th>
<th>20X7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food products</td>
<td>$3,500,000</td>
<td>$3,000,000</td>
<td>$2,400,000</td>
<td>$1,800,000</td>
<td>$550,000</td>
<td>$275,000</td>
</tr>
<tr>
<td>Health aids</td>
<td>2,000,000</td>
<td>1,270,000</td>
<td>1,100,000</td>
<td>700,000</td>
<td>300,000</td>
<td>125,000</td>
</tr>
<tr>
<td>Textiles</td>
<td>1,580,000</td>
<td>1,400,000</td>
<td>500,000</td>
<td>900,000</td>
<td>200,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Office equipment</td>
<td>920,000</td>
<td>1,330,000</td>
<td>800,000</td>
<td>1,000,000</td>
<td>650,000</td>
<td>750,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$8,000,000</strong></td>
<td><strong>$7,000,000</strong></td>
<td><strong>$4,800,000</strong></td>
<td><strong>$4,400,000</strong></td>
<td><strong>$1,700,000</strong></td>
<td><strong>$1,300,000</strong></td>
</tr>
</tbody>
</table>

- On January 1, 20X8, Century adopted a plan to sell the assets and product line of the office equipment division. As a result, the component’s operations and cash flows will be eliminated from the entity’s operations and the entity will have no significant continuing post-disposal involvement in the office equipment division’s operations. On September 1, the division’s assets and product line were sold for $2,100,000 cash which resulted in a gain on the sale of $640,000.

- The company's textiles division had six manufacturing plants which produced a variety of textile products. In April 20X8, the company sold one of these plants and realized a gain of $130,000. After the sale, the operations at the plant that was sold were transferred to the remaining five textile plants which the company continued to operate.

- In August 20X8, the main warehouse of the food products division, located on the banks of the Bayer River, was flooded when the river overflowed. The resulting damage of $420,000 is not included in the financial data given above. Historical records indicate that the Bayer River normally overflows every four to five years causing flood damage to adjacent property.

- For the two years ended December 31, 20X8 and 20X7, the company had interest revenue earned on investments of $70,000 and $40,000 respectively.

- For the two years ended December 31, 20X8 and 20X7, the company’s net income was $1,344,000 and $938,000 respectively.

The provision for income tax expense for each of the two years should be computed at a rate of 30%.

**Required:**

Prepare in proper form a comparative statement of income of the Century Company for the two years ended December 31, 20X8, and December 31, 20X7. Footnotes are not required.
NUMBER 3

The following pro forma statement of income and changes in equity accounts was prepared by the newly-hired staff accountant of Topaz, Inc., a nonpublic company, for the year ended December 31, 20X5.

Topaz, Inc.
STATEMENT OF INCOME AND CHANGES IN RETAINED EARNINGS
December 31, 20X5

Revenues and gains
Gross sales
Purchase discounts
Recovery of accounts receivable written off in prior years
Interest revenue
Gain from settlement with state on condemnation of property
  Total revenues and gains

Expenses and losses
Cost of goods sold
Sales returns and allowances
Selling expenses
General and Administrative expenses
Cash dividends declared
  Total expenses and losses
Income before discontinued operations and extraordinary item

Discontinued operations
Loss on disposal of discontinued styles, net of tax effect

Extraordinary item
Correction of errors in prior years’ statements, net of tax effect

Retained earnings at beginning of year
Income taxes
Net income

Additional information
- Topaz uses the allowance method to account for uncollectible accounts.
- The loss on disposal of discontinued styles resulted from the sale of outdated styles within a product line.
- Topaz had no temporary tax differences at the beginning or the end of the year.

Required:
Identify the weaknesses in classification and presentation in the above Statement of Income and Changes in Retained Earnings. Explain the proper classification and presentation. Do not prepare a corrected statement.
NUMBER 4

Interim financial reporting has become an important topic in accounting. There has been considerable discussion as to the proper method of reflecting results of operations at interim dates. Accordingly, the Accounting Principles Board issued an opinion clarifying some aspects of interim financial reporting.

Required:

a. Discuss generally how revenue should be recognized at interim dates and specifically how revenue should be recognized for industries subject to large seasonal fluctuations in revenue and for long-term contracts using the percentage-of-completion method at annual reporting dates.

b. Discuss generally how product and period costs should be recognized at interim dates. Also discuss how inventory and cost of goods sold may be afforded special accounting treatment at interim dates.

c. Discuss how the provision for income taxes is computed and reflected in interim financial statements.

NUMBER 5

Question 7 consists of 10 items. Select the best answer for each item. Answer all items.

On January 2, 20X5, Quo, Inc. hired Reed to be its controller. During the year, Reed, working closely with Quo's president and outside accountants, made changes in accounting policies, corrected several errors dating from 20X4 and before, and instituted new accounting policies.

Quo's 20X5 financial statements will be presented in comparative form with its 20X4 financial statements.

Required:

Items 1 through 10 represent Quo's transactions. List A represents possible classifications of these transactions as: a change in accounting principle, a change in accounting estimate, a correction of an error in previously presented financial statements, or neither an accounting change nor an accounting error.

List B represents the general accounting treatment required for these transactions. These treatments are:

- Cumulative effect approach—Include the cumulative effect of the adjustment resulting from the accounting change or error correction in the 20X5 financial statements, and do not restate the 20X4 financial statements.
- Retroactive restatement approach—Restate the 20X4 financial statements and adjust 20X4 beginning retained earnings if the error or change affects a period prior to 20X4.
- Prospective approach—Report 20X5 and future financial statements on the new basis, but do not restate 20X4 financial statements.

For each item, select one from List A and one from List B.

<table>
<thead>
<tr>
<th>List A (Select one)</th>
<th>List B (Select one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Change in accounting principle.</td>
<td>X. Cumulative effect approach.</td>
</tr>
<tr>
<td>B. Change in accounting estimate.</td>
<td>Y. Retroactive restatement approach.</td>
</tr>
<tr>
<td>C. Correction of an error in previously presented financial statements.</td>
<td>Z. Prospective approach.</td>
</tr>
<tr>
<td>D. Neither an accounting change nor an accounting error.</td>
<td></td>
</tr>
</tbody>
</table>
Items to be answered:

1. Quo manufactures heavy equipment to customer specifications on a contract basis. On the basis that it is preferable, accounting for these long-term contracts was switched from the completed-contract method to the percentage-of-completion method.

2. As a result of a production breakthrough, Quo determined that manufacturing equipment previously depreciated over 15 years should be depreciated over 20 years.

3. The equipment that Quo manufactures is sold with a five-year warranty. Because of a production breakthrough, Quo reduced its computation of warranty costs from 3% of sales to 1% of sales.

4. Quo changed from LIFO to FIFO to account for its finished goods inventory.

5. Quo changed from FIFO to average cost to account for its raw materials and work in process inventories.

6. Quo sells extended service contracts on its products. Because related services are performed over several years, in 20X5 Quo changed from the cash method to the accrual method of recognizing income from these service contracts.

7. During 20X5, Quo determined that an insurance premium paid and entirely expensed in 20X4 was for the period January 1, 20X4 through January 1, 20X6.

8. Quo changed its method of depreciating office equipment from an accelerated method to the straight-line method to more closely reflect costs in later years.

9. Quo instituted a pension plan for all employees in 20X5 and adopted Statement of Financial Accounting Standards No. 87, Employers' Accounting for Pensions. Quo had not previously had a pension plan.

10. During 20X5, Quo increased its investment in Worth, Inc. from a 10% interest, purchased in 20X4, to 30%, and acquired a seat on Worth's board of directors. As a result of its increased investment, Quo changed its method of accounting for investment in subsidiary from the cost method to the equity method.
Chapter Twelve
Solutions to Reporting the Results of Operations Questions

1. (a) The solutions approach is to use a "T" account and solve for the missing number.

<table>
<thead>
<tr>
<th></th>
<th>Beginning Inventory</th>
<th>Cost of Goods Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Goods Mfg.</td>
<td>200,000</td>
<td>240,000</td>
</tr>
<tr>
<td>Available for Sale</td>
<td>600,000</td>
<td></td>
</tr>
<tr>
<td>Ending Inventory</td>
<td>360,000</td>
<td></td>
</tr>
</tbody>
</table>

2. (c) The solutions approach would be to subtract the extraordinary item loss from earthquake damage ($20,000) from the debit column and adjust the debit balance to $400,000. Then combine the debit and credit balances to calculate income from continuing operations before tax of $200,000 ($600,000 – 400,000). Income from continuing operations after taxes would then be $140,000 ($200,000 – 60,000 tax).

3. (a) Selling expenses include:

   Advertising $150,000  
   Freight-out 80,000  
   Rent (½) 110,000  
   Sales salaries and commissions 140,000  
   Total $480,000

4. (d) In a single-step income statement, revenues include sales as well as miscellaneous income:

   Sales $187,000  
   Interest 10,200  
   Gain 4,700  
   Total $201,900

The discontinued operations and the cumulative effect of the accounting change are reported below income from continuing operations.

5. (b) ASC 225 requires that the loss be reported under discontinued operations as a loss from operations.

6. (d) The new definition for a discontinued operation is a set of operations and cash flows clearly distinguishable from the rest of the entity for operational and financial reporting purposes.

7. (a) The $400,000 impairment loss and the $1,000,000 loss from operations should be combined for a total loss from operations of $1,400,000.

8. (b) Since Georgia will not be significantly involved with Hambons after it is sold, it will be a discontinued operation. North Carolina, however, does have continuing significant involvement and will not be considered a discontinued operation.

9. (c) ASC 225 states that the results from discontinued operations should be reported when incurred: $150,000 income less $50,000 loss plus the gain on sale of $100,000 for a total of $200,000.
10. (c) Greer Co. recognizes the operating loss of $300,000 in 20X4 under “Discontinued Operations” but does not recognize the net gain on disposal since the gain has not yet been realized. In 20X5, the actual gain of $650,000 less the 20X5 operating loss of $300,000 is reported as Discontinued Operations" for the net amount of $350,000.

11. (a) The cumulative effect of a change in accounting principle is calculated at the beginning of the period of the change (ASC 250).

12. (c) The cumulative effect is the difference in the asset account after the income tax impact.
\[ 700,000 - (700,000 \times 0.3) = 490,000 \]

13. (d) ASC 250 requires that a change in accounting principle from accelerated depreciation method to the straight-line depreciation method is a change in principle that is inseparable from a change in estimate and should be accounted for as a change in accounting estimate. Therefore, this accounting change would not use retrospective application and the answer is zero. The accounting for a change in estimate affects only current and future periods.

14. (a) The cumulative effect shown as an adjustment to the January 1, 20X7, retained earnings is the decrease in the 20X7 beginning inventory caused by the change from FIFO ($83,000) to weighted average ($78,000). This $5,000 decrease would be shown as a debit (decrease) to Retained Earnings, January 1, and a decrease (credit) to beginning inventory.

15. (c) This is a normal accounting change requiring retroactive application. The cumulative effect of the change is therefore credited to retained earnings net of the income tax effect. The accounting change is $880,000 – $700,000 = $180,000 less the tax effect of $72,000 = $108,000. The tax effect is $180,000 \times 40\% = $72,000.

16. (c) The effect is an increase in the January 1, 20X8, retained earnings of $40,000 less the 30% tax effect ($12,000) for a net of $28,000.

17. (a) A change in depreciation is an exception to the normal rule of recording a change in accounting principle using the retrospective application approach. A change in depreciation is a change in accounting principle that is recorded as a change in accounting estimate. (b) and (c) are normal accounting changes. (d) is an accounting error.

18. (c) These are normal accounting changes that should adjust prior years’ statements for the new method and roll the effect of the changes forward as adjustments of beginning retained earnings.

19. (d) A change in the expected service life of an asset is a change in accounting estimate which does not require either of the two items as shown. Both of the items in the question are required for a change in accounting principle, not a change in estimate.

20. (c) The change in the estimated quantity of copper recoverable from a mine is a change in accounting estimate and should be accounted for in current and future periods. The cumulative effect and pro forma effects are used for changes in accounting principles and would not be appropriate for a change in estimate.

21. (b) Cost of the asset 1/1/X3 $100,000
Depreciation, 20X3-20X6:
\[ \frac{90,000}{10} \times 4 = 36,000 \]
Carrying value 12/31/X6 $64,000
Depreciation for 20X7:
\[ 64,000 - 4,000 = 60,000 \div 4 = 15,000 \]
Carrying value 12/31/X7 $49,000

22. (a) The change in the estimate for warranty costs is based on new information obtained from experience and qualifies as a change in accounting estimate. A change in accounting estimate affects current and future periods and is not accounted for by restating prior periods. The accounting change is a part of continuing operations but is not reported net of taxes.

23. (c) This is a change in accounting entity which requires restatement of prior periods being presented.
24. (d) The change is a change in accounting entity which reports the new group of companies as if the same group was the reporting entity in the past. Therefore, prior period statements are restated and retained earnings is adjusted for the differential.

25. (a) A change in accounting entity is "one special type of change in accounting principle" (APB Opinion No. 20, paragraph no. 12).

26. (a) Before net income and after discontinued operations of a segment of a business. See format on page 12-1.

27. (b) An extraordinary item is reported net of tax after income from discontinued operations.

28. (a) An extraordinary item is reported net of tax in its entirety in the quarterly period in which it occurs.

29. (b) ASC 405 requires that gains and losses from extinguishment of debt be reported as ordinary items. In this case the ordinary item will be a loss because Somar issued the bonds at a discount but retired them at a price (105) in excess of the face value of the bonds.

30. (a) Extraordinary items are transactions that are both unusual in nature and infrequent in occurrence. Neither the loss on foreign currency or the discontinued operations loss would be considered unusual or infrequent. Since the hurricane is the first ever to strike the Midway’s area, it should be an extraordinary item. The pretax loss would be $100,000 (equipment loss $800,000 minus $700,000 building gain). The building gain is the insurance proceeds of $1,000 – the carrying value of $300,000.

31. (a) A transaction which is infrequent but does not qualify as extraordinary is reported separately in the income statement whether it is a gain or loss.

32. (b) The insurance premiums of $60,000 were charged in error to insurance expense on the 20X8 income statements. The premiums should have been allocated equally at $20,000 per year for 20X8, 20X9, and 2010. Therefore, the beginning retained earnings at 20X9 are understated by $28,000—the effect of the error ($40,000) less the $12,000 tax effect ($40,000 × 30%). The corrected retained earnings would be the beginning balance plus the correction of the error ($400,000 + 28,000 = $428,000).

33. (c) The failure to accrue warranty costs of $50,000 in 20X4 is an accounting error that was discovered in 20X5. Since the error affected the income statement of 20X4, it is considered a prior period adjustment. The change in depreciation method is a change in accounting principle and is the type of change that should be reported on the 20X5 income statement.

34. (b) A prior-period adjustment is the correction of an error made in a prior period by reporting the adjustment net of tax in the statement of retained earnings. A change from an unaccepted accounting principle to an acceptable accounting principle is such a transaction. A change in the estimated lives of depreciable assets is a change in estimate, not a prior period adjustment.

35. (b) ASC 250, Par. 8, disclosure of significant accounting policies should be included as an integral part of the financial statements.

36. (c) Neither the composition of inventories nor the maturity of debt is a significant accounting policy with existing acceptable alternatives. These disclosures should be provided in later footnotes but not as part of the footnote which discloses the summary of significant accounting policies.

37. (b) Inventory pricing is a significant accounting policy which should be disclosed according to APB Opinion #22 but the composition of plant assets is not a policy disclosure.

38. (c) Gains and losses are generally recognized in the quarter in which they are transacted, not allocated to other interim quarters.
39. (a) The gross-profit method of inventory pricing is acceptable for interim reporting per ASC 270, par. 14(a).
   (b) Direct costing is never an acceptable method for financial reporting, because it excludes fixed manufacturing overhead in determining inventories.
   (c) Planned variances that are expected to be absorbed by the end of the annual period should be deferred, but unplanned variances should be reported at the end of the interim period. ASC 270, 14(d).
   (d) Inventory market declines should not be deferred unless they are temporary and no loss is expected to be incurred. ASC 270, Par. 14(c).

40. (b) The extraordinary loss is reported in the quarter in which it is transacted. The insurance expense is an anticipated expense and is allocated to each quarter of the year.

41. (b) The company should use the effective tax rate expected to be applicable for the full year of 20X9 as estimated at the end of the second quarter of 20X9 because the interim period is considered an integral part of the accounting year.

42. (c) Tech’s first quarter taxes would be calculated using the expected 20X3 effective annual rate of 25%. The tax expense would be $50,000 ($200,000 × 25%).

43. (a) The inventory decline in the first quarter should be recognized in that quarter because at that point it was the company’s judgment that the decline was not expected to reverse during the fiscal year. However, the decline was recovered in the third quarter. In that case the recovery recognized is limited to the amount of the decrease in the first quarter. To do otherwise would violate the cost principle for inventory.

44. (d) It was Petal’s best estimate at the end of the second quarter that the decline in market price was temporary and would be restored by the end of the year. In that case the inventory loss was not recognized in the second quarter. Since the price decline had not been restored by the end of the year, the loss would have to be recognized in the fourth quarter.

45. (C) Liability balance on 12/31/X5 = $800,000
   Accrued interest 80,000
   Total carrying value $880,000
   Future cash payments 780,000
   Gain $100,000

46. (d) Carrying value of obligation $500,000
   Plus accrued interest 75,000
   $575,000
   Fair market value of assets sacrificed ($375,000 + $50,000) 425,000
   Gain $150,000

47. (b) The extinguishment in a troubled situation is classified as an ordinary gain for the difference between the fair value of the equity interest and the carrying value of the liability (ASC 405).

48. (d) An ordinary loss of $5,000 should be recognized to reduce the equipment from its carrying value of $80,000 to the fair market value of $75,000. Kam Corp. should recognize an ordinary pre-tax gain of $25,000 because it was able to pay a $100,000 note by giving Finn Co. computer equipment with a fair market value of only $75,000. The ordinary gain of $25,000 less the ordinary loss is a net gain of $20,000.

49. (c) A development stage enterprise generally presents the same financial statements as an established enterprise with an income statement for the current period as well as from inception.

50. (a) A development stage enterprise generally uses the same GAAP as an established company.

51. (b) Accumulated net losses for development stage enterprises are shown in the stockholders’ equity section with
a descriptive caption, such as, “Deficit accumulated during the development stage.”

52. (d) Since developmental stage enterprises follow GAAP, the answer is not affected by the fact that Tanker Oil Co. is in the developmental stage. Legal fees for incorporation and other related matters are normally part of the organizational cost because they are necessary cost of getting the organization started. Underwriters’ fees for initial stock offering are usually treated as reductions in paid-in capital and exploration costs and purchase of mineral rights are considered to be costs of the natural resource.

53. (d) Pear’s 40% interest in Cinn’s common stock implies that Pear has significant influence over Cinn and should account its investment and earnings on the equity basis. Therefore, the equity in earnings of Cinn Co. is properly included on the income statement but the dividends received from Cinn should be a reduction of the investment and excluded from the income statement. The arithmetical errors are prior period adjustments and should be shown as deductions from beginning retained earnings in the statement of retained earnings. The adjusted 20X5 income before taxes is computed below:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controller’s income</td>
<td>$125,000</td>
</tr>
<tr>
<td>Less dividend received</td>
<td>(8,000)</td>
</tr>
<tr>
<td>Plus errors</td>
<td>35,000</td>
</tr>
<tr>
<td>Correct income</td>
<td>$152,000</td>
</tr>
</tbody>
</table>

54. (c) The key point to recognize is that all changes in accounting principle are effective as of the beginning of the year. Therefore, the gross effect of the change in the January 1, 20X1, balances would be $6,000 ($77,000 – 71,000). The cumulative effect of the change to be reported in retained earnings is gross change less the tax effect:

$6,000 – ($6,000 × 30%) = $4,200.

55. (b) The general rule for a change in accounting principle is retrospective application to previously issued financial statements and adjust the beginning retained earnings for the cumulative effect of the change net of taxes for all periods not reported.

56. (a) Interim Statements are affected by estimates, cost allocations, seasonality and other factors which may affect the usefulness of the information. Therefore, the emphasis on timeliness over reliability.

57. (c) ASC 230 on Cash Flows requires the disclosure as a part of significant accounting policies of a firm's policy for determining which investments are considered cash equivalents.

58. (a) 

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributed to youth and education programs</td>
<td>$250,000</td>
</tr>
<tr>
<td>Company’s share - share of contribution to the Health and Human-service organizations =</td>
<td>$140,000 – 80,000</td>
</tr>
<tr>
<td>Total charitable contribution expense</td>
<td>$310,000</td>
</tr>
</tbody>
</table>

59. (d) Since interest expense is not an operating expense, it should be shown on the income statement as a part of **Other Expenses and Losses**. On a multi-step income statement the operating expenses are split between selling expenses and general and administrative expenses. The advertising expense would be considered a selling expense and not a general and administrative expense.

60. (d) The key point is that these are two separate transactions and should not be netted as one transaction. ASC 405 requires that the gain on the extinguishment of debt be classified as an ordinary item. The loss on the investment in bonds does not meet the criteria of unusual and infrequent to be classified as extraordinary and should be considered a part of income before extraordinary items.

61. (a) The change from cash basis which is not GAAP to accrual basis which is GAAP is a correction of an error and should be reported as a prior period adjustment net of taxes.

62. (a) 

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying value of receivable 12/31/X3 =</td>
<td>$864,000</td>
</tr>
<tr>
<td>Future cash receipts: $60,000 + 60,000 + 600,000 =</td>
<td>720,000</td>
</tr>
</tbody>
</table>
Loss from restructuring $144,000

63. (a) This is the exception to the general rule of reporting a change in accounting principle by retrospective application. ASC 250 requires that a change in the method of calculating depreciation be reported as a change in accounting estimate affecting only current and future periods. There would not be any restatements of previous periods.

64. (d)

<table>
<thead>
<tr>
<th>Carrying Value</th>
<th>Accumulated Depreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost 1/2/X6</td>
<td>$264,000</td>
</tr>
<tr>
<td>Depreciation 20X6-20X8</td>
<td>$264 / 8 yrs. × 3 yrs.</td>
</tr>
<tr>
<td>Carrying value 1/2/X9</td>
<td>$165,000</td>
</tr>
<tr>
<td>Depreciation – 20X9</td>
<td>$165,000 – 24,000 3 years</td>
</tr>
<tr>
<td>Balance 12/31/X9</td>
<td>$118,000 $146,000</td>
</tr>
</tbody>
</table>

65. (c) The depreciation method is one of several alternatives and is therefore included in the summary of significant accounting policies. The composition of fixed assets is included in a separate footnote but not in the summary of significant accounting policies.

66. (c) The singular feature of ASC 235 is that it applies to not-for-profit entities.

67. (b) The amortization for prior years, $40,000, should be debited to retained earnings as a prior period adjustment and the current year's amortization, $20,000, should be charged to expense.

68. (c) The future cash payment of $980,000 is $60,000 less than the carrying value of the note and the accrued interest. This amount is recognized as a gain.

69. (d) Increase in prepaid insurance in 20X7

\[
\begin{align*}
\text{Expense recognized in 20X7} & = 437,500 \\
\text{Total premiums paid in 20X7} & = 455,000
\end{align*}
\]

70. (c) Both depreciation and bonuses are anticipated, recurring expenses which should be allocated to each interim period.

| Expense for the year | $180,000 |
| 1/2 for six months ended 6/30/X6 | 90,000 |

71. (b) Property taxes—anticipated recurring expenses—allocated equally to all four quarters—$180,000 ÷ 4 = $45,000 per quarter.

Repairs—unanticipated expense allocated to remaining quarters—$300,000 ÷ 3 = $100,000.

Total expenses allocated to the second quarter = $145,000.

72. (b) The summary of significant accounting policies should include alternative acceptable accounting policies such as either percentage of completion or completed contract for long-term construction contracts. The other
alternative answers relate to specific disclosures to be made in separate footnotes.

73. (a) None of the transactions are classified as extraordinary since they all relate to operational activities or assets and cannot be considered to be unusual. Therefore, the answer is $300,000 + $120,000 + $190,000 = $610,000.

74. (d) ASC 405 now requires that gains or losses on reacquisition and retirement of bonds be recorded as ordinary income. The $75,000 gain due to translation and the $240,000 gain on sale of a plant facility are unusual but would not be considered infrequent and therefore would not be considered extraordinary items. The answer is $210,000 + $75,000 + $240,000 = $525,000.

75. (c) The described change is a change in estimate which is prospective in nature affecting the reporting of only current and future periods.

76. (d) This is the exception to the general rule of reporting a change in accounting principle by retrospective application. ASC 250 requires that a change in the method of calculating depreciation be reported as a change in accounting estimate affecting only current and future periods. Therefore, there would not be an amount showing the cumulative effect of the change on the income statement.

77. (d) Since there would not be an entry for the cumulative effect of the change as explained in question #84, there would not be any effect on the deferred tax liability account.

78. (a) As with any company, the operating expenses include research and development costs, laboratory operations, general and administrative and depreciation expenses.

79. (a) GAAP is no different for development stage enterprises than for operating companies. Development stage enterprises do present additional disclosures and reporting periods in the financial statements.

80. (d) A change in reporting entity is accounted for by restating the financial statements of a prior period presented. A change in reporting entity is considered a special type of change in accounting principle.

81. (a) The loss from discontinued operations includes both the $480,000 loss on disposal and the $120,000 loss from operations prior to the measurement date.

82. (a) General and administrative expenses include:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal and audit fees</td>
<td>$170,000</td>
</tr>
<tr>
<td>Rent for office space (½)</td>
<td>$120,000</td>
</tr>
<tr>
<td>Total</td>
<td>$290,000</td>
</tr>
</tbody>
</table>

The interest and the loss would be reported as other (non-operating) items in a multiple-step income statement.

83. (a) A change in accounting principle that is inseparable from a change in accounting estimate is accounted for as change in accounting estimate (ASC 250). A change in accounting estimate affects current and future periods and is reported in the continuing operations sections of the income statement.

84. (c) ASC 225 states that a transaction that is both unusual in nature and infrequent in occurrence is an extraordinary item. Since the question indicates that earthquakes are rare in the area in which Koff’s plant is located, this would be considered an extraordinary item. The extraordinary item is reported as the gross amount of the loss of $700,000 less the 40% tax effect of $280,000 for a net extraordinary item of $420,000.

85. (d) ASC 220 does not require a single display presentation for elements of comprehensive income and the total of comprehensive income, but it does require that these items be presented in a financial statement that is displayed with the same prominence as other financial statements, which together constitute a full set of financial statements.

86. (b) Number 2 is one of the impracticability criteria but material cost of retrospective application is not a criterion.
87. (b) In general, the accounting for a change in accounting principle is accounted for by using the retrospective method. The exception is a change in accounting principle that is inseparable from a change in accounting estimate. This type of change is accounted for as a change in estimate. Since Off-Line changed its method of accounting for demo cost based on new information (“increasing number of demos placed with customers that did not result in sales”), this meets the “inseparability” criterion and should be accounted for as a change in accounting estimate. Therefore, write-off of the $500,000 should be changed to the current period and the retained earnings at the beginning would not be affected ($0).

88. (c) The ordinary gain on Casey Corp.’s books is the difference between the carrying value of the note ($185,000) and the fair value of the land ($120,000) for the gain of $65,000 (ASC 360).

89. (a) For interim statements (not year-end statements) a company may use its judgment in recording a quarterly decline in the market value of its inventory. In this case, Wilson correctly used its judgment by not recording the loss in the first quarter and then recording a gain in the third quarter for the market recovery.

90. (b) The gain from disposal of a business component is the gain on sale of $90,000 less the operating losses of $20,000 in January and $30,000 in February for a net gain of $40,000.

91. (c) Gain is the carrying value of the note ($150,000) less the fair value of the land ($100,000) for a net gain of $50,000. The journal entry to adjust the land to its fair value would result in an ordinary gain of $25,000.

92. (a) The debtor compares the total future cash payments to the carrying amount of the debt. The creditor compares the present of future cash payments at the original interest rate to the carrying amount of the debt.

93. (c) Comprehensive income consists of net income and the other comprehensive income items. The other comprehensive items are foreign currency translation gain and unrealized gain on available for sale securities. Therefore, the answer would be $400,000 + $100,000 + $20,000 for a total of $520,000.

94. (c) A prior period adjustment to beginning retained earnings is an error that occurred in a prior year. The accounting for an error is to correct all prior statements affected by the error and roll the cumulative effect of the error, net of tax, forward as an adjustment to beginning retained earnings of the current year. Answer is (c) because the failure to defer the $5 million in revenue overstated income and retained earnings for the previous year. Answer (a) is incorrect because the error occurred in the current year. Answers (b) and (d) are errors affecting comprehensive income and would be corrected by adjusting the stockholders’ equity account, accumulated other comprehensive income.

95. (c) The failure to accrue the liabilities understated the liabilities and understated the insurance cost. By understating the insurance cost, the net income was overstated which caused retained earnings to be overstated.

96. (c) The depreciation expense would be deducted on the income statement to match the cost of using up the asset with the revenue generated by the asset. The drawing account represents withdrawals of assets by the owner and are similar to dividends in a corporation. Like dividends, drawings reduce the equity of the entity (owner’s capital account) and do not affect the income statement.

97. (a) The summary of significant accounting policies should disclose the approach used when an entity has a choice between different accounting alternatives. In this case an entity could either use the percentage completion or completed contract method as the basis of profit recognition on long-term contracts. The summary of significant accounting policies should disclose the choice between the two methods. Answer B is incorrect because the lease information would be disclosed in the lease footnote. Answer C. Depreciation expense would normally be disclosed on the income statement and answer D. Composition of sales by segment would normally be disclosed in the segment disclosure section of the Financial statements. The segment sales are usually broken down between external and internal sales.

98. (d) The summary of significant accounting policies should disclose the approach used when an entity has a choice between different accounting alternatives. A, B, and C are incorrect because they deal with facts, not accounting alternatives. So, the answer is D, Revenue Recognition policies. For example, construction revenue on
long-term constructs may be recognized under the percentage completion or completed contraction method and the method chosen would be disclosed in the summary of significant accounting policies.

99. (b) ASC 235 states that disclosure of accounting policies should be included as an integral part of the Financial statements. Answer (c) is incorrect because ASC 235 permits flexibility in the disclosure of accounting policies. Although the pronouncement suggests the use of a footnote entitled summary of significant Accounting Policies it does not require it. For example, a company may disclose its inventory method in the body of the balance sheet,

\[
\text{Inventory (FIFO)} \quad XXX
\]

Answer (d) is wrong because there is not a requirement to duplicate details disclosed elsewhere. However, cross-referencing is permitted. Answer (a) is incorrect because even though disclosures of principles and methods peculiar to the industry is required, the disclosure is not limited to the peculiar principles and methods.

100. (b) The error would cause Depreciation Expense and Accumulated Depreciation to be understated in the prior year by $40,000. Therefore, the answer is (b) and answers (a) and (c) are incorrect. Answer (d) is incorrect because the error would cause an overstatement of net income.

101. (d) ASC 250 states that a change in an accounting estimate affects current and future periods only and does not affect previous years. Therefore, it is not a prior period adjustment or a pro forma change.

102. (a). The keyword is that inventory losses should be generally recognized in interim statements using lower cost or market for inventory valuation. For example, if ABC Company had a LCM loss in the first quarter of Year 2, but in ABC’s judgment the loss would reverse by the fourth quarter of Year 2, ABC could postpone the recognition of the loss. The theory is why recognize a loss in the first quarter in order to recognize a gain when the loss is reversed in the fourth quarter. B is incorrect because it states that temporary market declines should be recognized. it ignores the exception permitted in our example. Answer C is wrong because of the word only LCM may also be used. Answer D is incorrect because of the word fully. Recoveries of partial gains may also be recognized.

103. (a) Answers B, C and D are all components of other comprehensive income. Answer A, extraordinary gains from extinguishment of debt are not a part of other comprehensive income. Furthermore, gains from extinguishment of debt are no longer considered extraordinary.

104. (a) Items included on the statement of comprehensive state are closed to the stockholders’ equity account, accumulated other comprehensive income. Answer B is incorrect because a separate statement of other comprehensive is not required. A combined statement of income and comprehensive income is another reporting option. C is incorrect because comprehensive income does not include all changes in stockholders’ equity. For example, issuance of common stock or the payment of dividends affect stockholders’ equity but do not affect comprehensive income. Answer D is wrong because comprehensive income is reported on both interim and year-end financial statements.

105. (d) The company went from an incorrect cash basis to a correct GAAP accrual basis. This is a correction of an error and would be reported as a prior-period adjustment.

106. (a) Neither of the items are extraordinary items. The gain or disposal of a business segment is a part of discontinued operations. The foreign currency translation gain is a part of other comprehensive income.

107. (c) The net income is the sales revenue of $800,000 less the cost of goods sold of $600,000 less the operating expenses of $90,000 for a net income of $110,000. Comprehensive income is net income of $110,000 plus the unrealized holding gain on available-for-sale securities, net of tax ($30,000) for a total comprehensive income of $140,000.

108. (c) IFRS does not show a separate category on its income statement for extraordinary items.

109. (d) Under IFRS, operating expense may be classified by function or by nature.

110. (b) IFRS requires current and prior year statements
111. (c) IFRS does not allow comprehensive income to be presented as a part of the statement of stockholders’ equity.

112. (a) Research and Development Expense would be classified as a functional expense. All the other expenses would be classified as nature.

113. (d) IFRS does not specify a particular format.

114. (d) In the US and under IFRS a change in accounting principle is presented on a retrospective basis.
Chapter Twelve
Solutions to Reporting the Results of Operations
Problems

NUMBER 1

1. (b) An increase in the unrealized excess of cost over market value of short-term marketable equity securities (unrealized loss on current marketable equity securities) should be included in income from continuing operations. In addition ASC 320 requires separate disclosure (either on the face of the statement or in the notes) of the change in the valuation allowance.

2. (d) An increase in the unrealized excess of cost over market value of long-term marketable equity securities (unrealized loss on long-term marketable securities) should be included in the stockholders’ equity section of the balance sheet. ASC 320 requires separate disclosure of the change in the valuation allowance.

3. (e) Income from a discontinued segment is shown on the income statement after income from continuing operations and before extraordinary items. Therefore, it would not meet any of the financial categories given, so the answer would be none of the above categories.

4. (b) The key word is “remeasuring”. Remeasuring means that the functional currency is not the local currency. A gain on remeasuring a foreign subsidiary’s financial statements from the local currency into the functional currency is reported as a part of continuing operations. Separate disclosure should be made for the aggregate gain or loss for the period.

5. (d) The key word is “translating”. In translating a foreign subsidiary’s financial statements (the local currency is the functional currency), the translation loss adjustment is reported as a separate component of stockholders’ equity.

6. (c) Extraordinary items are transactions that are both unusual and infrequent. Since this earthquake occurred in an area previously considered to be subject to only minor tremors, it would be considered to be unusual and infrequent and it would be reported as an extraordinary item.

7. (e) The probable receipt of $1,000,000 from a pending lawsuit is a contingent gain. Contingent gains are not recognized (accrued) until realized. Disclosure of the contingent gain should be made, but care should be taken to avoid misleading implications as to the likelihood of realization.

8. (b) The outside purchase of R&D services are recognized as a part of the R&D expense of the period and are reported as a part of continuing operations. In addition, separate disclosure of total R&D should be made.
The Century Company

COMPARATIVE STATEMENT OF INCOME
For the Two Years Ended December 31, 20X8 and December 31, 20X7

<table>
<thead>
<tr>
<th>20X8</th>
<th>20X7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Sales</td>
<td>$7,080,000</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>4,000,000</td>
</tr>
<tr>
<td>Gross profit on sales</td>
<td>$3,080,000</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>1,050,000</td>
</tr>
<tr>
<td>Operating income</td>
<td>$2,030,000</td>
</tr>
<tr>
<td>Other revenue and (expenses)</td>
<td></td>
</tr>
<tr>
<td>Interest revenue</td>
<td>70,000</td>
</tr>
<tr>
<td>Gain on sale of plant</td>
<td>130,000</td>
</tr>
<tr>
<td>Loss due to flood damage</td>
<td>$(420,000)</td>
</tr>
<tr>
<td></td>
<td>$(220,000)</td>
</tr>
<tr>
<td>Income from continuing operations before income taxes</td>
<td>$1,810,000</td>
</tr>
<tr>
<td>Less provision for income taxes</td>
<td>543,000</td>
</tr>
<tr>
<td>Income from continuing operations</td>
<td>$1,267,000</td>
</tr>
<tr>
<td>Discontinued operations</td>
<td></td>
</tr>
<tr>
<td>(Loss) from operations of discontinued office equipment division (less income taxes of $126,000)</td>
<td>—</td>
</tr>
<tr>
<td>Gain on disposal of office equipment division (less applicable income taxes of $33,000)</td>
<td>77,000</td>
</tr>
<tr>
<td>Net income</td>
<td>$1,344,000</td>
</tr>
</tbody>
</table>

SCHEDULE TO CALCULATE NUMBERS FOR DISCONTINUED OPERATIONS

<table>
<thead>
<tr>
<th>20X8</th>
<th>20X7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>$920,000</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(800,000)</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>(650,000)</td>
</tr>
<tr>
<td>Income before taxes</td>
<td>($530,000)</td>
</tr>
<tr>
<td>Gain on sale</td>
<td>640,000</td>
</tr>
<tr>
<td>Net before taxes</td>
<td>$ 110,000</td>
</tr>
<tr>
<td>Taxes at 30%</td>
<td>( 33,000)</td>
</tr>
<tr>
<td>Net after taxes</td>
<td>$ 77,000</td>
</tr>
</tbody>
</table>
NUMBER 3

There are a number of weaknesses noted in the Statement of Income and Changes in Retained Earnings.

- The first weakness noted is the heading. An income statement reports the results of an entity’s earning activities for an accounting period. Accordingly, the statement should be titled “For the Year Ended December 31, 20X5.”

- The Revenues and gains section improperly includes several items. “Purchase discounts” should reduce the cost of purchases or cost of goods sold. It is not theoretically sound to consider as revenue savings on purchases. Also, under the allowance method of accounting for uncollectible account, recovery of accounts receivable written off in previous years should be credited to the allowance for uncollectible accounts.

- The Expenses and losses section also contains errors. Sales returns and allowances should be offset against or deducted from gross sales. Cash dividends are not an expense, but should be shown as a reduction of retained earnings.

- Discontinued operations includes a loss that does not meet the criteria for discontinued operations. The loss on disposal of discontinued styles should be classified as ordinary and usual and be reported in the Expenses and losses section of the income statement. An ordinary loss should not be shown net of tax effect.

To qualify as discontinued operations, a component must be “held for sale”. The operations and cash flows must be eliminated from the entity’s operations and the entity should not have any significant continuing post-disposal involvement in the component’s operations.

- Income before extraordinary item should be shown before the extraordinary item. The caption for the extraordinary item is properly positioned on the income statement, but contains two errors.

  First, gain from settlement with state on condemnation of property is both unusual and infrequent, which qualifies it as an extraordinary item which should be reported net of tax. It is incorrectly reported in the problem under “Revenues and Gains.”.

  Second, the error discovered from the previous year is not an extraordinary item, but should be treated as a prior period adjustment. Accordingly, the retained earnings balance at the beginning of the year should be adjusted by the amount of the error correction, net of tax effect, and the income statement should include a subtotal titled “Retained earnings at beginning of year as restated.” Cash dividends declared should be deducted from this subtotal.

- Income taxes and net income should be shown elsewhere on the Statement. Income taxes should be deducted in arriving at income before extraordinary item, either included as the last item in the expenses section or shown as a separate line item before income before extraordinary item. Net income should be reported immediately before beginning retained earnings.
NUMBER 4

a. Sales and other revenues should be recognized for interim financial statement purposes in the same manner as revenues are recognized for annual reporting purposes. This means normally at the point of sale or, in the case of services, at completion of the earnings process.

In the case of industries whose sales vary greatly due to the seasonal nature of business, revenues should still be recognized as earned, but a disclosure should be made of the seasonal nature of the business in the notes.

In the case of long-term contracts recognizing earnings on the percentage-of-completion basis, the current state of completion of the contract should be estimated and revenue recognized at interim dates in the same manner as at the normal year end.

b. For interim reporting purposes, product costs (costs directly attributable to the production of goods or services) should be matched with the product and associated revenues in the same manner as for annual reporting purposes.

Period costs (costs not directly associated with the production of a particular good or service) should be charged to earnings as incurred or allocated among interim periods based on an estimate of time expired, benefit received, or other activity associated with the particular interim period(s). Also, if a gain or loss occurs during an interim period and is a type that would not be deferred at year end, the gain or loss should be recognized in full in the interim period in which it occurs. Finally, in allocating period costs among interim periods, the basis for allocation must be supportable and may not be based on merely an arbitrary assignment of costs between interim periods.

The AICPA Accounting Principles Board allowed for some variances from the normal method of determining cost of goods sold and valuation of inventories at interim dates in Opinion no. 28, but these methods are allowable only at interim dates and must be fully disclosed in a footnote to the financial statements. Some companies use the gross profit method of estimating cost of goods sold and ending inventory at interim dates instead of taking a complete physical inventory. This is an allowable procedure at interim dates, but the company must disclose the method used and any significant variances that subsequently result from reconciliation of the results obtained using the gross profit method and the results obtained after taking the annual physical inventory.

At interim dates, companies using the LIFO cost-flow assumption may temporarily have a reduction in inventory level that results in a liquidation of base period tiers of inventory. If this liquidation is considered temporary and is expected to be replaced prior to year end, the company should charge cost of goods sold at current prices. The difference between the carrying value of the inventory and the current replacement cost of the inventory is a current liability for replacement of LIFO base inventory temporarily depleted. When the temporary liquidation is replaced, inventory is debited for the original LIFO value and the liability is removed.

Inventory losses from a decline in market value at interim dates should not be deferred but should be recognized in the period in which they occur. However, if in a subsequent interim period the market price of the written-down inventory increases, a gain should be recognized for the recovery up to the amount of the loss previously recognized. If a temporary decline in market value below cost can reasonably be expected to be recovered prior to year end, no loss should be recognized.

Finally, if a company uses a standard costing system to compute cost of goods sold and to value inventories, variances from standard should be treated at interim dates in the same manner as at year end. However, if variances occur at an interim date that are expected to be absorbed prior to year end, the variances should be deferred instead of being immediately recognized.
c. The AICPA Accounting Principles Board stated that the provision for income taxes shown in interim financial statements must be based upon the effective tax rate expected for the entire annual period for ordinary earnings. The effective tax rate is, in accordance with previous APB opinions, based on earnings for financial statement purposes as opposed to taxable income which may consider timing differences. This effective tax rate is the combined federal and state(s) income tax rate applied to expected annual earnings, taking into consideration all anticipated investment tax credits, foreign tax rates, percentage depletion capital gains rates, and other available tax planning alternatives. Ordinary earnings do not include unusual or extraordinary items, discontinued operations, or cumulative effects of changes in accounting principles, all of which will be separately reported or reported net of their related tax effect in reports for the interim period or for the fiscal year. The amount shown as the provision for income taxes at interim dates should be computed on a year-to-date basis. For example, the provision for income taxes for the second quarter of a company's fiscal year is the result of applying the expected rate to year-to-date earnings and subtracting the provision recorded for the first quarter. There are several variables in this computation (expected earnings may change, tax rates may change), and the year-to-date method of computation provides the only continuous method of approximating the provision for income taxes at interim dates. However, if the effective rate or expected annual earnings change between interim periods, the change is not reflected retroactively but the effect of the change is absorbed in the current interim period.

NUMBER 5

1. **AY** Changing the method of accounting for long-term contracts is a change in accounting principle that must be accounted for retroactively.

2. **BZ** A change in the useful life of equipment based on new information or additional experience is a change in accounting estimate that should be accounted for in current and future (prospective) years.

3. **BZ** The change in estimated warranty costs is a change in accounting estimate that should be accounted for in current and future (prospective) years.

4. **AY** A change from LIFO to another acceptable inventory method is a change in accounting principle that must be accounted for retroactively.

5. **AY** A change from FIFO to another acceptable inventory method is a change in accounting principle that must be accounted for retroactively.

6. **CY** A change from the cash basis (an incorrect method) to the accrual basis is a correction of an error and should be accounted for retroactively.

7. **CY** Charging the entire insurance premium to expense is an error and should be accounted for retroactively.

8. **BZ** In general, the accounting for a change in accounting principle is accounted for by using the retrospective method. The exception is a change in accounting principle that is inseparable from a change in accounting estimate. This type of change is accounted for as a change in estimate. A change in depreciation methods is an example of this “inseparability” criterion. Therefore, this change in accounting principle would be accounted for as a change in accounting estimate.

9. **DZ** Since Quo had not previously had a pension plan, the implementation of the pension plan in 2000 would not be an accounting change. The pension cost would accrue in 2000 and future years (prospectively).

10. **DY** A change in accounting principle occurs when an accounting principle different from the one used previously for reporting purposes is adopted. For a change to occur, a choice between two or more accounting principles must exist. In this case, the change in Quo’s situation dictates that the equity method be used to account for the investment. Consequently, this is not an accounting change. However, ASC 323 requires that the investment account be retroactively restated to reflect balances as if the equity method had always been used.

12S-15
Chapter 12 Simulation Exercises

NUMBER 1

The following condensed trial balance of Powell Corp., a publicly-owned company, has been adjusted except for income tax expense:

Powell Corp.
CONDENSED TRIAL BALANCE
June 30, 20X6

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>$25,080,000</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>$  9,870,000</td>
</tr>
<tr>
<td>5% cumulative preferred stock</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>10,000,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>2,900,000</td>
</tr>
<tr>
<td>Machine sales</td>
<td>750,000</td>
</tr>
<tr>
<td>Service revenues</td>
<td>250,000</td>
</tr>
<tr>
<td>Interest revenue</td>
<td>10,000</td>
</tr>
<tr>
<td>Gain on sale of factory</td>
<td>250,000</td>
</tr>
<tr>
<td>Foreign currency translation adjustments</td>
<td>30,000</td>
</tr>
<tr>
<td>Cost of sales - machines</td>
<td>425,000</td>
</tr>
<tr>
<td>Cost of services</td>
<td>100,000</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>300,000</td>
</tr>
<tr>
<td>Research and development expenses</td>
<td>110,000</td>
</tr>
<tr>
<td>Interest expense</td>
<td>5,000</td>
</tr>
<tr>
<td>Loss from asset disposal</td>
<td>40,000</td>
</tr>
<tr>
<td>____________________________</td>
<td>________________</td>
</tr>
<tr>
<td>____________</td>
<td>____________</td>
</tr>
<tr>
<td>$26,060,000</td>
<td>$26,060,000</td>
</tr>
</tbody>
</table>

Other information and financial data for the year ended June 30, 20X6, follows:

- The weighted average number of common shares outstanding during 20X6 was 200,000. The potential dilution from the exercise of stock options held by Powell’s officers and directors was not material.
- There were no dividends-in-arrears on Powell’s preferred stock at July 1, 20X5. On May 1, 20X6, Powell’s directors declared a 5% preferred stock dividend to be paid in August 20X6.
- During 20X6, one of Powell’s foreign factories was expropriated by the foreign government, and Powell received a $900,000 payment from the foreign government in settlement. The carrying value of the plant was $650,000. Powell has never disposed of a factory.
- Administrative expenses includes a $5,000 premium payment for a $1,000,000 life insurance policy on Powell’s president, of which the corporation is the beneficiary.
- Powell depreciates its assets using the straight-line method for financial reporting purposes and an accelerated method for tax purposes. The differences between book and tax depreciation are as follows:

<table>
<thead>
<tr>
<th>Financial statements over</th>
<th>(under) tax depreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 30</td>
<td></td>
</tr>
<tr>
<td>20X6</td>
<td>$(15,000)</td>
</tr>
<tr>
<td>20X7</td>
<td>10,000</td>
</tr>
<tr>
<td>20X8</td>
<td>5,000</td>
</tr>
</tbody>
</table>

There were no other temporary differences.

- Powell’s enacted tax rate for the current and future years is 30%.

Required:

a. Prepare a separate single-step income statement and a separate statement of comprehensive income for the year ended June 30, 20X6.

b. Prepare a schedule reconciling Powell’s financial statement net income to taxable income for the year ended June 30, 20X6.
The following condensed trial balance of Probe Co., a publicly-held company, has been adjusted except for income tax expense.

**Probe Co.**

**CONDENSED TRIAL BALANCE**

<table>
<thead>
<tr>
<th>Item</th>
<th>12/31/20X5</th>
<th>12/31/20X4</th>
<th>Net change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. (Cr.)</td>
<td>Dr. (Cr.)</td>
<td>Dr. (Cr.)</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$ 473,000</td>
<td>$ 817,000</td>
<td>($344,000)</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>670,000</td>
<td>610,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Property, plant, and equipment</td>
<td>1,070,000</td>
<td>995,000</td>
<td>75,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(345,000)</td>
<td>(280,000)</td>
<td>(65,000)</td>
</tr>
<tr>
<td>Dividends payable</td>
<td>(25,000)</td>
<td>(10,000)</td>
<td>(15,000)</td>
</tr>
<tr>
<td>Income taxes payable</td>
<td>35,000</td>
<td>(150,000)</td>
<td>185,000</td>
</tr>
<tr>
<td>Deferred income tax liability</td>
<td>(42,000)</td>
<td>(42,000)</td>
<td>--</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>(500,000)</td>
<td>(1,000,000)</td>
<td>500,000</td>
</tr>
<tr>
<td>Unamortized premium on bonds</td>
<td>(71,000)</td>
<td>(150,000)</td>
<td>79,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>(350,000)</td>
<td>(150,000)</td>
<td>(200,000)</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>(430,000)</td>
<td>(375,000)</td>
<td>(55,000)</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>(185,000)</td>
<td>(265,000)</td>
<td>80,000</td>
</tr>
<tr>
<td>Sales</td>
<td>(2,420,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of sales</td>
<td>1,863,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling and administrative expenses</td>
<td>220,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest income</td>
<td>(14,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>46,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>88,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss on sale of equipment</td>
<td>7,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain from settlement with state</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on condemnation of property</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unrealized holding gain on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-For-Sale securities</td>
<td>(20,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ 0</td>
<td>$ 0</td>
<td>$300,000</td>
</tr>
</tbody>
</table>

**Additional information:**

- During 20X5 equipment with an original cost of $50,000 was sold for cash, and equipment costing $125,000 was purchased.

- On January 1, 20X5, bonds with a par value of $500,000 and related premium of $75,000 were redeemed. The $1,000 face value, 10% par bonds had been issued on January 1, 20X3, to yield 8%. Interest is payable annually every December 31 for the next five years.

- Probe's tax payments during 20X5 were debited to Income Taxes Payable. For the year ended December 31, 20X4 probe, recorded a deferred income tax liability of $42,000 based on temporary differences of $120,000 and an enacted tax rate of 35%. Probe's 20X5 financial statement income before income taxes was greater than its 20X5 taxable income, due entirely to temporary differences, by $60,000. Probe's cumulative net taxable temporary differences at December 31, 20X5, were $180,000. Probe's enacted tax rate for the current and future years is 30%.

- 60,000 shares of common stock, $2.50 par, were outstanding on December 31, 20X4. Probe issued an additional 80,000 shares on April 1, 20X5.

- There were no changes to retained earnings other than dividends declared.

**Required:** Prepare a combined multiple-step income statements and statement of comprehensive income for the year ended December 31, 20X5, with earnings per share information and supporting computations for current and deferred income tax expense.
Section A:

The following condensed trial balance of Powell Corp., a publicly-owned company, has been adjusted except for income tax expense:

---

**Powell Corp.**

**CONDENSED TRIAL BALANCE**

**June 30, 20X6**

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>$25,080,000</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>$ 9,870,000</td>
</tr>
<tr>
<td>5% cumulative preferred stock</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>10,000,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>2,900,000</td>
</tr>
<tr>
<td>Machine sales</td>
<td>750,000</td>
</tr>
<tr>
<td>Service revenues</td>
<td>250,000</td>
</tr>
<tr>
<td>Interest revenue</td>
<td>10,000</td>
</tr>
<tr>
<td>Gain on sale of factory</td>
<td>250,000</td>
</tr>
<tr>
<td>Foreign currency translation adjustments</td>
<td>30,000</td>
</tr>
<tr>
<td>Cost of sales - machines</td>
<td>425,000</td>
</tr>
<tr>
<td>Cost of services</td>
<td>100,000</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>300,000</td>
</tr>
<tr>
<td>Research and development expenses</td>
<td>110,000</td>
</tr>
<tr>
<td>Interest expense</td>
<td>5,000</td>
</tr>
<tr>
<td>Loss from asset disposal</td>
<td>40,000</td>
</tr>
</tbody>
</table>

---

Other information and financial data for the year ended June 30, 20X6, follows:

- The weighted average number of common shares outstanding during 20X6 was 200,000. The potential dilution from the exercise of stock options held by Powell’s officers and directors was not material.
- There were no dividends-in-arrears on Powell’s preferred stock at July 1, 20X5. On May 1, 20X6, Powell’s directors declared a 5% preferred stock dividend to be paid in August 20X6.
- During 20X6, one of Powell’s foreign factories was expropriated by the foreign government, and Powell received a $900,000 payment from the foreign government in settlement. The carrying value of the plant was $650,000. Powell has never disposed of a factory.
- Administrative expensed includes a $5,000 premium payment for a $1,000,000 life insurance policy on Powell’s president, of which the corporation is the beneficiary.
- Powell depreciates its assets using the straight-line method for financial reporting purposes and an accelerated method for tax purposes. The differences between book and tax depreciation are as follows:

  | Financial statements over (under) tax depreciation |
  | June 30 | 20X6    | $(15,000) |
  |         | 20X7    | 10,000    |
  |         | 20X8    | 5,000     |

There were no other temporary differences.

- Powell’s enacted tax rate for the current and future years is 30%.
Required:

a. Prepare a separate single-step income statement and a separate statement of comprehensive income for the year ended June 30, 20X6.

b. Prepare a schedule reconciling Powell’s financial statement net income to taxable income for the year ended June 30, 20X6.

Section B – Research:

In preparing an income statement, we occasionally report an “extraordinary item”. What are the criteria used by the accounting profession to identify an extraordinary item?

Note: On the computerized CPA exam, the candidate will be required to use the Research tab to look for the definition.

NUMBER 4 – Consists of Sections A and B

Section A:

The following condensed trial balance of Probe Co., a publicly-held company, has been adjusted except for income tax expense.

<table>
<thead>
<tr>
<th>Probe Co.</th>
<th>CONDENSED TRIAL BALANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12/31/20X5</td>
</tr>
<tr>
<td></td>
<td>Dr. (Cr.)</td>
</tr>
<tr>
<td>Cash</td>
<td>$473,000</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>670,000</td>
</tr>
<tr>
<td>Property, plant, and equipment</td>
<td>1,070,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(345,000)</td>
</tr>
<tr>
<td>Dividends payable</td>
<td>(25,000)</td>
</tr>
<tr>
<td>Income taxes payable</td>
<td>35,000</td>
</tr>
<tr>
<td>Deferred income tax liability</td>
<td>(42,000)</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>(500,000)</td>
</tr>
<tr>
<td>Unamortized premium on bonds</td>
<td>(71,000)</td>
</tr>
<tr>
<td>Common stock</td>
<td>(350,000)</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>(430,000)</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>(185,000)</td>
</tr>
<tr>
<td>Sales</td>
<td>(2,420,000)</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>1,863,000</td>
</tr>
<tr>
<td>Selling and administrative expenses</td>
<td>220,000</td>
</tr>
<tr>
<td>Interest income</td>
<td>(14,000)</td>
</tr>
<tr>
<td>Interest expense</td>
<td>46,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>88,000</td>
</tr>
<tr>
<td>Loss on sale of equipment</td>
<td>7,000</td>
</tr>
<tr>
<td>Gain from settlement with state on condemnation of property</td>
<td>(90,000)</td>
</tr>
<tr>
<td>Unrealized holding gain on Available-For-Sale securities</td>
<td>(20,000)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$0</strong></td>
</tr>
</tbody>
</table>
Addional information:

- During 20X5 equipment with an original cost of $50,000 was sold for cash, and equipment costing $125,000 was purchased.
- On January 1, 20X5, bonds with a par value of $500,000 and related premium of $75,000 were redeemed. The $1,000 face value, 10% par bonds had been issued on January 1, 20X3, to yield 8%. Interest is payable annually every December 31 for the next five years.
- Probe's tax payments during 20X5 were debited to Income Taxes Payable. For the year ended December 31, 20X4 probe, recorded a deferred income tax liability of $42,000 based on temporary differences of $120,000 and an enacted tax rate of 35%. Probe's 20X5 financial statement income before income taxes was greater than its 20X5 taxable income, due entirely to temporary differences, by $60,000. Probe's cumulative net taxable temporary differences at December 31, 20X5, were $180,000. Probe's enacted tax rate for the current and future years is 30%.
- 60,000 shares of common stock, $2.50 par, were outstanding on December 31, 20X4. Probe issued an additional 80,000 shares on April 1, 20X5.
- There were no changes to retained earnings other than dividends declared.

Required: Prepare a combined multiple-step income statements and statement of comprehensive income for the year ended December 31, 20X5, with earnings per share information and supporting computations for current and deferred income tax expense.

Section B:

In discussing reporting discontinued operations under SFAS 144, the FASB defined a “component of a unit” as one that comprises operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity. It then listed four examples of items that are considered “components of a unit”. Please research the literature and list those four examples.

Note: On the computerized CPA exam, the candidate will be required to use the Research tab to look for the definition, and “cut and paste it” in the appropriate space.
Chapter 12 Simulation Solutions

NUMBER 1

a.
Powell Corp.

INCOME STATEMENT
For the Year Ended June 30, 20X6

Revenues:
- Machine sales $750,000
- Service revenues 250,000
- Interest revenue 10,000

Total revenues $1,010,000

Expenses:
- Cost of sales - machines 425,000
- Cost of services 100,000
- Administrative expenses 300,000
- Research and development expenses 110,000
- Interest expense 5,000
- Loss from asset disposal 40,000
- Current income tax expense 6,000
- Deferred income tax expense 4,500

Total expenses and losses 990,500

Income before extraordinary gain 19,500

Extraordinary gain, net of income taxes of $75,000 175,000

Net income $194,500

STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED JUNE 30, 20X6

Net Income $194,500

Other comprehensive income
- Foreign currency translation adjustments net of income taxes of $9,000 21,000

Comprehensive income $215,500

Earnings (loss) per share:
- Income before extraordinary gain* ($0.40)
- Net income $0.47

b.

Net income $194,500

Add:
- Taxes on extraordinary gain 75,000
- Provision for income taxes 10,500

Financial statement income before income taxes 280,000

Permanent difference - officer’s life insurance 5,000

Temporary difference - excess of tax over financial statement depreciation (15,000)

Taxable income $270,000

* Income before extraordinary gain $19,500 – Preferred dividends of $100,000
   200,000 shares = ($0.40)
**Probe Co.**

**STATEMENT OF INCOME AND COMPREHENSIVE INCOME**

*For the Year Ended December 31, 20X5*

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$2,420,000</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>1,863,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>557,000</td>
</tr>
<tr>
<td>Selling and administrative expenses</td>
<td>$220,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>88,000</td>
</tr>
<tr>
<td>Operating income</td>
<td>308,000</td>
</tr>
<tr>
<td>Interest income</td>
<td>14,000</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(46,000)</td>
</tr>
<tr>
<td>Loss on sale of equipment</td>
<td>(7,000)</td>
</tr>
<tr>
<td>Income before income tax and extraordinary item</td>
<td>210,000</td>
</tr>
<tr>
<td>Income tax:</td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td>45,000</td>
</tr>
<tr>
<td>[1]</td>
<td></td>
</tr>
<tr>
<td>Deferred</td>
<td>12,000</td>
</tr>
<tr>
<td>[2]</td>
<td></td>
</tr>
<tr>
<td>Income before extraordinary item</td>
<td>153,000</td>
</tr>
<tr>
<td>Extraordinary item:</td>
<td></td>
</tr>
<tr>
<td>Gain on condemned property, net of income taxes of $27,000</td>
<td>63,000</td>
</tr>
<tr>
<td>Net income</td>
<td>$216,000</td>
</tr>
<tr>
<td>Other comprehensive income, net of tax</td>
<td></td>
</tr>
<tr>
<td>Unrealized holding gain on Available-for-Sale securities</td>
<td></td>
</tr>
<tr>
<td>net of income taxes of $6,000</td>
<td>14,000</td>
</tr>
<tr>
<td>Comprehensive income</td>
<td>$230,000</td>
</tr>
<tr>
<td>Earnings per share</td>
<td></td>
</tr>
<tr>
<td>Earnings before extraordinary item</td>
<td>$1.275</td>
</tr>
<tr>
<td>[3]</td>
<td></td>
</tr>
<tr>
<td>Extraordinary item</td>
<td>.525</td>
</tr>
<tr>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>$1.800</td>
</tr>
</tbody>
</table>

**[1] Current income tax expense:**

- Income before income tax and extraordinary item: $210,000
- Differences between financial statement and taxable income: (60,000)
- Income subject to tax: 150,000
- Income tax rate: × 30%
- Income tax excluding extraordinary item: $45,000

**[2] Deferred income tax expense:**

- Cumulative temporary differences - 12/31/X5: $180,000
- Income tax rate: × 30%
- Deferred tax liability -- 12/31/X5: 54,000
- Deferred tax liability -- 12/31/X4: 42,000
- Deferred tax expense for 20X5: $12,000

**[3] Earnings per share:**

- Weighted average number of shares outstanding for 2000:
  - January through March: 60,000 × 3 = 180,000
  - April through December: 140,000 × 9 = 1,260,000
  - Total: 1,440,000
- Income before extraordinary item: 153,000

- Earnings per share: (153,000 ÷ 120,000) = 1.275
Section A:

a. Powell Corp.

INCOME STATEMENT
For the Year Ended June 30, 20X6

Revenues:
- Machine sales $750,000
- Service revenues 250,000
- Interest revenue 10,000
Total revenues $1,010,000

Expenses:
- Cost of sales - machines 425,000
- Cost of services 100,000
- Administrative expenses 300,000
- Research and development expenses 110,000
- Interest expense 5,000
- Loss from asset disposal 40,000
- Current income tax expense 6,000
- Deferred income tax expense 4,500
Total expenses and losses 990,500
Income before extraordinary gain 19,500
Extraordinary gain, net of income taxes of $75,000 175,000
Net income $194,500

STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED JUNE 30, 20X6

Net Income $194,500

Other comprehensive income
- Foreign currency translation adjustments net of income taxes of $9,000 21,000
Comprehensive income $215,500

Earnings (loss) per share:
- Income before extraordinary gain* ($0.40)
- Net income $0.47

b.

Net income $194,500
Add:
- Taxes on extraordinary gain 75,000
- Provision for income taxes 10,500
Financial statement income before income taxes 280,000
Permanent difference - officer’s life insurance 5,000
Temporary difference - excess of tax over financial statement depreciation (15,000)
Taxable income $270,000

* Income before extraordinary gain $19,500 – Preferred dividends of $100,000
200,000 shares = ($0.40)
Section B:

In ASC 225, the criteria for identifying an extraordinary item are as follows:

(a) Unusual Nature – the underlying event or transaction should possess a high degree of abnormality and be of a type clearly unrelated to, or only incidentally related to, the ordinary and typical activities of the entity, taking into account the environment in which the entity operates.

(b) Infrequency of occurrence – the underlying event or transaction should be of a type that would not reasonably be expected to recur in the foreseeable future, taking into account the environment in which the entity operates.

NUMBER 4

Section A:

Probe Co.
STATEMENT OF INCOME AND COMPREHENSIVE INCOME
For the Year Ended December 31, 20X5

Sales $2,420,000
Cost of sales 1,863,000
Gross profit 557,000
Selling and administrative expenses $220,000
Depreciation 88,000
Operating income 249,000
Other income (expenses):
    Interest income 14,000
    Interest expense (46,000)
    Loss on sale of equipment (7,000)
Income before income tax and extraordinary item 210,000
Income tax:
    Current 45,000 [1]
    Deferred 12,000 [2] 57,000
Income before extraordinary item 153,000
Extraordinary item:
    Gain on condemned property, net of income taxes of $27,000 63,000
Net income $216,000
Other comprehensive income, net of tax
    Unrealized holding gain on Available-for-Sale securities net of income taxes of $6,000 14,000
Comprehensive income $230,000

Earnings per share
    Earnings before extraordinary item $1.275 [3]
    Extraordinary item .525 Optional
    Net income $1.800

[1] Current income tax expense:
    Income before income tax and extraordinary item $210,000
    Differences between financial statement and taxable income (60,000)
    Income subject to tax 150,000
    Income tax rate \times 30\%
    Income tax excluding extraordinary item $45,000
Deferred income tax expense:
Cumulative temporary differences - 12/31/X5 $180,000
Income tax rate \( \times 30\% \)
Deferred tax liability -- 12/31/X5 54,000
Deferred tax liability -- 12/31/X4 42,000
Deferred tax expense for 20X5 $12,000

Earnings per share:
Weighted average number of shares outstanding for 2000:
January through March 60,000 \( \times 3 \) 180,000
April through December 140,000 \( \times 9 \) 1,260,000
Total 1,440,000
\( \div 12 \)
120,000
Income before extraordinary item 153,000
Earnings per share \((153,000 \div 120,000)\) 1.275

Section B:

In paragraph 41 of ASC 280, the following four items were listed as examples of a component of a unit:

A component of an entity may be a reportable segment or an operating segment, a reporting unit (as that term is defined in ASC 280), a subsidiary, or an asset group.
Chapter Thirteen
Accounting for Income Taxes  Accounting Standards Codification

The ASC covered in this chapter is ASC 740, Income Taxes with a brief reference to ASC 450, Contingencies.

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Basic Principles and Objectives

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An Enacted Change in Tax Laws or Rates
Annual Computation of a Deferred Tax Liability or Asset

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Chapter Thirteen
Accounting for Income Taxes

INCOME TAX ALLOCATION—ASC 740

Income tax allocation in accounting is necessary because of the accrual concept that costs incurred in an accounting period should be matched with the income that resulted in such costs, regardless of when such costs are ultimately paid. Income taxes—federal, state, local, and foreign—are significant costs which must be matched with the income that gave rise to the taxes to fulfill the major objective of corporate financial reporting.

Principal Problem Areas
1. Transactions affect book income in one period and taxable income in another, and result in temporary differences.
2. Recognition of the tax effects of a net operating loss. Will the effect be recognized in the period of the loss or in the period the taxable income is reduced by means of carrybacks and carryforwards?
3. The treatment of tax effects of extraordinary items, disposal of a segment of a business, and discontinued operations referred to as intraperiod income tax allocation.

The FASB's conclusions regarding these problem areas are as follows:
1. There should be interperiod income tax allocation and the “asset and liability” method should be used.
2. The deferred tax account will be calculated using future enacted tax rates.
3. Carrybacks should affect the loss periods; carryforwards will usually be recognized subject to a valuation allowance.
4. The statements will disclose the income taxes currently payable and the expense related to the period.
5. Deferred taxes should be classified net current and net noncurrent.
6. Tax allocation within a period (intraperiod) is appropriate in that the tax effects of all items which are segregated from income from continuing operations should be shown along with the related tax effect of such items.
7. Tax allocation within a period (intraperiod) is also appropriate for other comprehensive income items included in comprehensive income. (ASC 740)

Basic Principles and Objectives
One objective of accounting for income taxes is to recognize the amount of taxes payable or refundable for the current year. A second objective is to recognize deferred tax liabilities and assets for the future tax consequences of events that have been recognized in an enterprise’s financial statements or tax returns.

Ideally, the second objective might be stated more specifically to recognize the expected future tax consequences of events that have been recognized in the financial statements or tax returns. However, that objective is realistically constrained because (a) the tax payment or refund that results from a particular tax return is a joint result of all the items included in that return, (b) taxes that will be paid or refunded in future years are the joint result of events of the current or prior years and events of future years, and (c) information available about the future is limited. As a result, attribution of taxes to individual items and events is arbitrary and, except in the simplest situations, requires estimates and approximations.

To implement the objectives in light of those constraints, the following basic principles are applied in accounting for income taxes at the date of the financial statements:

a. A current tax liability or asset is recognized for the estimated taxes payable or refundable on tax returns for the current year.

b. A deferred tax liability or asset is recognized for the estimated future tax effects attributable to temporary differences and carryforwards.

c. The measurement of current and deferred tax liabilities and assets is based on provisions of the enacted tax law; the effects of future changes in tax laws or rates are not anticipated.

d. The measurement of deferred tax assets is reduced, if necessary, by the amount of any tax benefits that, based on available evidence, are not expected to be realized.
TEMPORARY DIFFERENCES
The tax consequences of most events recognized in the current year's financial statements are included in determining income taxes currently payable. However, because tax laws and financial accounting standards differ in their recognition and measurement of assets, liabilities, equity, revenues, expenses, gains, and losses, differences arise between the following:

a. The amount of taxable income and pretax financial income for a year
b. The tax bases of assets or liabilities and their reported amounts in financial statements.

An assumption inherent in an enterprise's statement of financial position prepared in accordance with generally accepted accounting principles is that the reported amounts of assets and liabilities will be recovered and settled, respectively.

Because of that assumption, a difference between the tax basis of an asset or a liability and its reported amount in the statement of financial position will result in taxable or deductible amounts in some future year without regard to other future events. Examples follow:

a. **Revenues or gains that are taxable after they are recognized in financial income** (installment sale).
b. **Expenses or losses that are deductible after they are recognized in financial income** (a product warranty liability).
c. **Revenues or gains that are taxable before they are recognized in financial income** (subscriptions received in advance).
d. **Expenses or losses that are deductible before they are recognized in financial income** (depreciable property).

These examples pertain to revenues, expenses, gains, or losses that are included in taxable income of an earlier or later year than the year in which they are recognized in financial income. Those differences between taxable income and pretax financial income also create differences between the tax basis of an asset or liability and its reported amount in the financial statements. The differences result in taxable or deductible amounts when the reported amount of an asset or liability in the financial statements is recovered or settled, respectively. SFAS #109 refers collectively to these differences as **temporary differences**.

**Example:**
In 1999 Noll Corp. reported income before depreciation of $900,000. Noll deducted depreciation for financial reporting of $400,000 and $600,000 on its 1999 tax return. The $200,000 temporary depreciation difference is expected to reverse equally over the next three years. Noll’s enacted tax rates are 30% for 1999 and 25% for the following three years.

Required: Prepare the tax journal entry for 1999.

**Solution:**

<table>
<thead>
<tr>
<th>Book</th>
<th>Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income before depreciation</td>
<td>$900,000</td>
</tr>
<tr>
<td>Depreciation Expense</td>
<td>(400,000)</td>
</tr>
<tr>
<td>Income before tax</td>
<td>500,000</td>
</tr>
<tr>
<td>Income taxes (see JE)</td>
<td></td>
</tr>
<tr>
<td>Currently payable</td>
<td>(90,000)</td>
</tr>
<tr>
<td>Deferred taxes</td>
<td>(50,000)</td>
</tr>
<tr>
<td>Net Income</td>
<td>$360,000</td>
</tr>
</tbody>
</table>

**Journal Entry:**

<table>
<thead>
<tr>
<th></th>
<th>Book</th>
<th>Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income tax expense – current</td>
<td>90,000</td>
<td></td>
</tr>
<tr>
<td>Income tax expense – deferred</td>
<td>50,000*</td>
<td></td>
</tr>
<tr>
<td>Income tax payable</td>
<td>90,000**</td>
<td></td>
</tr>
<tr>
<td>Deferred tax payable</td>
<td>50,000</td>
<td></td>
</tr>
</tbody>
</table>

* The deferred tax of $50,000 is the temporary difference of $200,000 times the future enacted tax rate of 25%.
** The income tax payable is the taxable income of $300,000 times the current tax rate of 30%.
PERMANENT DIFFERENCES

A permanent difference arises when revenues are exempt from taxation or expenses are not allowable as deductions for tax purposes. Permanent differences cause differences in book net income and tax net income. Permanent differences do not cause differences in taxes (only temporary differences can create differences in taxes). Some examples of common permanent differences are listed below:

a. State and municipal bond interest income: included in book income but not included in taxable income.
b. Dividends received exclusion: deducted for taxable income but not for book income.
c. Life insurance premiums on executives when the corporation is the beneficiary: deducted as an expense for book purposes but not deducted for tax purposes. Conversely, proceeds received from life insurance policies are included in book income but excluded from taxable income.
d. Payment of fines and penalties: included in book income but not included in taxable income.

The following problem illustrates the effect of permanent differences:

Example:
Seaboard Corp. has income of $200,000 for books and taxes before considering the permanent differences listed below:
a. Interest income on municipal bonds is $30,000.
b. Life insurance premiums of $20,000 have been paid on Seaboard executives and the Corporation is the beneficiary.

Assuming a 30% tax rate, what would be the journal entry to record the taxes?

Solution:

<table>
<thead>
<tr>
<th></th>
<th>Book</th>
<th>Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income before permanent differences</td>
<td>$200,000</td>
<td>$200,000</td>
</tr>
<tr>
<td>Interest income on municipal bonds</td>
<td>30,000</td>
<td>0</td>
</tr>
<tr>
<td>Life insurance premiums on executives</td>
<td>(20,000)</td>
<td>0</td>
</tr>
<tr>
<td>Income before taxes</td>
<td>$210,000</td>
<td>$200,000</td>
</tr>
<tr>
<td>Taxes at 30% (see below*)</td>
<td>(60,000)</td>
<td>(60,000)</td>
</tr>
<tr>
<td>Net income</td>
<td>$150,000</td>
<td>$140,000</td>
</tr>
</tbody>
</table>

* Entry to record taxes:

Income tax expense - current 60,000
Tax payable 60,000

Note from the above problem that the permanent differences cause a difference in net income but do not cause a difference in taxes.

Deferred Tax Assets and Liabilities
An enterprise shall recognize a deferred tax liability or asset for all temporary differences and operating loss and tax credit carryforwards in accordance with the provisions below. Deferred tax expense or benefit is the change during the year in an enterprise’s deferred tax liabilities and assets.

The statement requires comprehensive allocation using the liability method. This method is balance-sheet oriented. The total tax that will be assessed on temporary differences when they reverse is accrued and reported.

The deferred tax amount that is reported as an asset or liability on the balance sheet represents the effect of all temporary differences, which will reverse in the future using current tax rates and laws and those in existence in the year(s) in which the temporary differences reverse. Therefore, income tax expense is equal to income taxes currently payable plus or minus the change in the deferred tax account.
An Enacted Change in Tax Laws or Rates
A deferred tax liability or asset shall be adjusted for the effect of a change in tax law or rates. The effect shall be included in income from continuing operations for the period that includes the enactment date.

Annual Computation of a Deferred Tax Liability or Asset
Deferred taxes shall be determined separately for each tax-paying component (an individual entity or group of entities that is consolidated for tax purposes) in each tax jurisdiction. That determination includes the following procedures:

- a. Identify (1) the types and amounts of existing temporary differences and (2) the nature and amount of each type of operating loss and tax credit carryforward and the remaining length of the carryforward period.
- b. Measure the total deferred tax liability for taxable temporary differences using the tax rate in effect when temporary difference reverses.
- c. Measure the total deferred tax asset for deductible temporary differences and operating loss carryforwards using the applicable tax rate.
- d. Measure deferred tax assets for each type of tax credit carryforward.
- e. Reduce deferred tax assets by a valuation allowance if, based on the weight of available evidence, it is more likely than not (a likelihood of more than 50 percent) that some portion or all of the deferred tax assets will not be realized. The valuation allowance should be sufficient to reduce the deferred tax asset to the amount that is more likely than not to be realized.

The objective is to measure a deferred tax liability or asset using the enacted tax rate(s) expected to apply to taxable income in the periods in which the deferred tax liability or asset is expected to be settled or realized. Under current U.S. federal tax law, if taxable income exceeds a specified amount, all taxable income is taxed, in substance, at a single flat tax rate. That tax rate shall be used for measurement of a deferred tax liability or asset by enterprises for which graduated tax rates are not a significant factor. Enterprises for which graduated tax rates are a significant factor shall measure a deferred tax liability or asset using the average graduated tax rate applicable to the amount of estimated annual taxable income in the periods in which the deferred tax liability or asset is estimated to be settled or realized.

VALUATION ALLOWANCE
All available evidence, both positive and negative, should be considered to determine whether, based on the weight of that evidence, a valuation allowance is needed. Information about an enterprise’s current financial position and its results of operations for the current and preceding years ordinarily is readily available. That historical information is supplemented by all currently available information about future years. Sometimes, however, historical information may not be available (for example, start-up operations) or it may not be as relevant (for example, if there has been a significant, recent change in circumstances) and special attention is required.

Future realization of the tax benefit of an existing deductible temporary difference or carryforward ultimately depends on the existence of sufficient taxable income of the appropriate character (for example, ordinary income or capital gain) within the carryback, carryforward period available under the tax law. The following four possible sources of taxable income may be available under the tax law to realize a tax benefit for deductible temporary differences and carryforwards:

- a. Future reversals of existing taxable temporary differences.
- b. Future taxable income exclusive of reversing temporary differences and carryforwards.
- c. Taxable income in prior carryback year(s) if carryback is permitted under the tax law.
- d. Tax-planning strategies that would, if necessary, be implemented to, for example:
  (1) Accelerate taxable amounts to utilize expiring carryforwards
  (2) Change the character of taxable or deductible amounts from ordinary income or loss to capital gain or loss.
  (3) Switch from tax-exempt to taxable investments.
Forming a conclusion that a valuation allowance is not needed is difficult when there is negative evidence such as cumulative losses in recent years. Other examples of negative evidence include (but are not limited to) the following:

a. A history of operating loss or tax credit carryforwards expiring unused
b. Losses expected in early future years (by a presently profitable entity)
c. Unsettled circumstances that, if unfavorably resolved, would adversely affect future operations and profit levels on a continuing basis in future years
d. A carryback, carryforward period that is so brief that it would limit realization of tax benefits if (1) a significant deductible temporary difference is expected to reverse in a single year or (2) the enterprise operates in a traditionally cyclical business.

Examples (not prerequisites) of positive evidence that might support a conclusion that a valuation allowance is not needed when there is negative evidence include (but are not limited to) the following:

a. Existing contracts or firm sales backlog that will produce more than enough taxable income to realize the deferred tax asset based on existing sales prices and cost structures
b. An excess of appreciated asset value of the tax basis of the entity’s net assets in an amount sufficient to realize the deferred tax asset
c. A strong earnings history exclusive of the loss that created the future deductible amount (tax loss carryforward or deductible temporary difference) coupled with evidence indicating that the loss (for example, an unusual, infrequent, or extraordinary item) is an aberration rather than a continuing condition.

An enterprise must use judgment in considering the relative impact of negative and positive evidence. The weight given to the potential effect of negative and positive evidence should be commensurate with the extent to which it can be objectively verified. The more negative evidence that exists (a) the more positive evidence is necessary and (b) the more difficult it is to support a conclusion that a valuation allowance is not needed for some portion or all of the deferred tax asset.

**A Change in the Valuation Allowance**

The effect of a change in the beginning-of-the-year balance of a valuation allowance that results from a change in circumstances that causes a change in judgment about the realizability of the related deferred tax asset in future years ordinarily shall be included in income from continuing operations. Exceptions include certain temporary differences of an acquired corporation and adjustments to beginning retained earnings for certain accounting changes or prior period adjustments.

**FINANCIAL STATEMENT PRESENTATION**

In a classified statement of financial position, an enterprise shall separate deferred tax liabilities and assets into a current amount and a noncurrent amount. Deferred tax liabilities and assets shall be classified as current or noncurrent based on the classification of the related asset or liability for financial reporting. A deferred tax liability or asset that is not related to an asset or liability for financial reporting, including deferred tax assets related to carryforwards, shall be classified according to the expected reversal date of the temporary difference. The valuation allowance for a particular tax jurisdiction shall be allocated between current and noncurrent deferred tax assets for that tax jurisdiction on a pro rata basis.

For a particular tax-paying component of an enterprise and within a particular tax jurisdiction, (a) all current deferred tax liabilities and assets shall be offset and presented as a single amount and (b) all noncurrent deferred tax liabilities and assets shall be offset and presented as a single amount.

**Financial Statement Disclosure**

The components of the net deferred tax liability or asset recognized in an enterprise’s statement of financial position shall be disclosed as follows:

a. The total of all deferred tax liabilities.

b. The total of all deferred tax assets.

c. The total valuation allowance recognized for deferred tax assets.
The net change during the year in the total valuation allowance also shall be disclosed. A **public enterprise** shall disclose the approximate tax effect of each type of temporary difference and carryforward that gives rise to a significant portion of deferred tax liabilities and deferred tax assets (before allocation of valuation allowances). A **nonpublic enterprise** shall disclose the types of significant temporary differences and carryforwards but may omit disclosure of the tax effects of each type. A public enterprise that is not subject to income taxes because its income is taxed directly to its owners shall disclose that fact and the net difference between the tax bases and the reported amounts of the enterprise’s assets and liabilities.

The significant components of income tax expense attributable to continuing operations for each year presented shall be disclosed in the financial statements or notes thereto. Those components would include, for example:

a. **Current tax expense or benefit**
b. Deferred tax expense or benefit (exclusive of the effects of other components listed below)
c. Investment tax credits
d. Government grants (to the extent recognized as a reduction of income tax expense)
e. The benefits of operating loss carryforwards
f. Tax expense that results from allocating certain tax benefits either directly to contributed capital or to reduce goodwill or other noncurrent intangible assets of an acquired entity
g. Adjustments of a deferred tax liability or asset for enacted changes in tax laws or rates or a change in the tax status of the enterprise
h. Adjustments of the beginning-of-the-year balance of a valuation allowance because of a change in circumstances that causes a change in judgment about the realizability of the related deferred tax asset in future years.

The amount of income tax expense or benefit allocated to continuing operations and the amounts separately allocated to other items shall be disclosed for each year for which those items are presented.

A public enterprise shall disclose a reconciliation using percentages or dollar amounts of (a) the reported amount of income tax expense attributable to continuing operations for the year to (b) the amount of income tax expense that would result from applying domestic federal statutory tax rates to pretax income from continuing operations. The “statutory” tax rates shall be the regular tax rates if there are alternative tax systems. The estimated amount and the nature of each significant reconciling item shall be disclosed. A nonpublic enterprise shall disclose the nature of significant reconciling items but may omit a numerical reconciliation.

An enterprise shall disclose the amounts and expiration dates of operating loss and tax credit carryforwards for tax purposes.

**ASC 740 Accounting for Uncertainty in Income Taxes**

ASC 740 creates a model to address uncertainty in income tax positions. It also removes income taxes from ASC 450, Accounting for Contingencies.

A tax position can result in a permanent reduction of income tax payable, create a temporary difference or create a change in tax payable.

For example, tax positions may include a decision not to file a tax return, a shift of income between jurisdictions, income exclusions or a decision to classify a transaction as tax exempt.

ASC 740 utilizes a two-step approach for evaluating tax positions:

**Step One** – Recognition occurs when a business concludes that a tax position, based solely on its technical merits, is more likely than not (a probability that is more than 50%) to be sustained upon examination.
Step Two – Measurement recognizes the maximum tax benefit that is more than likely than not (more than 50%) to be realized upon ultimate settlement.

For example, assume that an entity is considering a deduction in its current tax return of $1000 and determines that the tax position meets “the more likely than not” threshold. If the entity is “highly certain” of its position, it should deduct the $1,000. However, if the entity is unclear as to measurement, ASC 740 introduced a **cumulative probability approach** to deal with the uncertainty.

For example consider the following situation:

<table>
<thead>
<tr>
<th>Possible Outcome</th>
<th>Individual Probability</th>
<th>Cumulative Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1000</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>$ 800</td>
<td>20%</td>
<td>50%</td>
</tr>
<tr>
<td>$ 600</td>
<td>20%</td>
<td>70%</td>
</tr>
<tr>
<td>$ 400</td>
<td>20%</td>
<td>90%</td>
</tr>
<tr>
<td>$ 200</td>
<td>10%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Based on the cumulative probability approach the entity would deduct $600, the amount **above** the cumulative probability of 50%. Note that $800 would not be the answer because it is **not above** a cumulative 50%. The $600 deduction is called the “unit of account” for the tax position.

**LOSS CARRYBACKS AND LOSS CARRYFORWARDS**

The 1997 tax law allows a pretax operating loss to be carried back to the **two** preceding periods resulting in a tax credit. The tax rate in existence at each of prior balance sheet dates is used to calculate the amount of the tax credit. Losses remaining after the carrybacks may be carried forward for **20** years to offset income if income exists in any of the future **20** years.

FASB #109 requires that the tax benefit of a loss carryforward be recognized as a deferred tax asset in the year of the loss. The deferred tax asset may be reduced by a valuation allowance if necessary. Companies at the time of the loss may forgo the loss carryback and elect to use only the carryforward provision.

**Example of loss carryback and loss carryforward:**

BG Corp. has reported combined income before taxes of $150,000 for the years 1998 and 1999. In 2000 the Corporation has a pretax loss (NOL) of $250,000. The tax rate is 30% for 1998 and 1999 and 25% for the year 2000.

**Solution:**

In 2000 BG Corp. would take $150,000 of the NOL and carry it back for two years. At a 30% tax rate, the Corporation would receive a $45,000 tax refund (30% × $150,000). The journal entry would be:

- **Tax refund receivable** $45,000
- **Tax benefit of operating loss carryback** $45,000

The remaining $100,000 of the NOL should be recognized as a carryforward in 2000. The tax benefit of the carryforward is $25,000 (25% × $100,000). However, the company feels that based on the weight of evidence available, it is more likely than not that $10,000 of the tax benefit will not be realized. The Company’s entries to record the tax benefit and the valuation allowance are as follows:
Deferred tax asset $ 25,000
Tax benefit of operating loss carryforward $25,000
Tax benefit of loss carryforward $ 10,000
Allowance to reduce deferred tax assets to expected realizable value $10,000

Income Statement Presentation
The income statement for the year 2000 would appear as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss before income taxes</td>
<td>($250,000)</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
</tr>
<tr>
<td>Benefit from operating loss carryback</td>
<td>$45,000</td>
</tr>
<tr>
<td>Benefit from operating loss carryforward</td>
<td>15,000</td>
</tr>
<tr>
<td>Net Loss</td>
<td>($190,000)</td>
</tr>
</tbody>
</table>

Balance Sheet Disclosure
Deferred tax asset $ 25,000
Less:
Allowance to reduce deferred tax assets to expected realizable value ( 10,000)
Expected realizable value $ 15,000

Illustrations - Temporary Differences
Example #1—Deferred Tax Liability (one difference)
Asset acquired in 1999 for $10,000. For financial reporting, the asset is depreciated over five years using straight-line. For tax purposes, the asset is recovered using MACRS three-year class. Assume a current (and future) tax rate of 30%. The company's taxable income for 1999 is $100,000.

a) Depreciation

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax (rounded)</td>
<td>$3,300</td>
<td>$4,400</td>
<td>$1,500</td>
<td>$  800</td>
<td>- 0 -</td>
</tr>
<tr>
<td>Book</td>
<td>2,000</td>
<td>2,000</td>
<td>2,000</td>
<td>2,000</td>
<td>2,000</td>
</tr>
</tbody>
</table>

b) Net taxable or deductible amounts in each year:

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxable</td>
<td>$500</td>
<td>$1,200</td>
<td>$2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deductible</td>
<td>$1,300</td>
<td>$2,400</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c) Flow of deferred tax liability account:

<table>
<thead>
<tr>
<th>Year</th>
<th>Deductible (Taxable)</th>
<th>Change in account (30%)</th>
<th>Balance in account</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>$1,300</td>
<td>+ $390</td>
<td>$ (390)</td>
</tr>
<tr>
<td>2000</td>
<td>2,400</td>
<td>+ 720</td>
<td>(1,110)</td>
</tr>
<tr>
<td>2001</td>
<td>(500)</td>
<td>− 150</td>
<td>(960)</td>
</tr>
<tr>
<td>2002</td>
<td>(1,200)</td>
<td>− 360</td>
<td>(600)</td>
</tr>
<tr>
<td>2003</td>
<td>(2,000)</td>
<td>− 600</td>
<td>−0−</td>
</tr>
</tbody>
</table>

The journal entry for income tax expense at 12/31/99 would be:

12/31/99 Income tax expense $30,390
Deferred income tax liability $ 390
Income tax payable (.30 × $100,000) 30,000
The journal entry for income tax expense for 12/31/00 assuming a taxable income of $100,000 would be:

12/31/00  Income tax expense  $30,720
           Deferred income tax liability  $  720
           Income tax payable  30,000

**Example #2—Multiple Temporary Differences**

Using the same facts as in Example #1, assume that, in addition, the company recognized a warranty expense of $3,000 for financial reporting in 2000 which (the company estimates) will be recognized for tax purposes as follows:

- 2000—$300;
- 2001—$400;
- 2002—$1,000;
- 2003—$1,300

The deferred tax asset is determined independently from the deferred tax liability.

Flow of deferred tax asset account:

<table>
<thead>
<tr>
<th>Year</th>
<th>Taxable (Deductible)</th>
<th>Change in account (30%)</th>
<th>Balance in account</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$2,700¹</td>
<td>+$810</td>
<td>$810</td>
</tr>
<tr>
<td>2001</td>
<td>(400)</td>
<td>– 120</td>
<td>690</td>
</tr>
<tr>
<td>2002</td>
<td>(1,000)</td>
<td>– 300</td>
<td>390</td>
</tr>
<tr>
<td>2003</td>
<td>(1,300)</td>
<td>– 390</td>
<td>–0–</td>
</tr>
</tbody>
</table>

Since the deferred tax asset is greater than the liability, the need for a valuation allowance must be evaluated. It is assumed that no such allowance is required in this example.

¹$3,000 – $300

12/31/00 Income tax expense  $29,910
Deferred tax asset  810
Income tax payable  $30,000
Deferred tax liability  720

**ILLUSTRATIVE PROBLEM**

In January 2000, you began the examination of the financial statements for the year ended Dec. 31, 1999, of Sesame Corporation, a new audit client. During your examination the following information was disclosed:

1. The 1999 federal tax return reported taxable income of $175,000 and taxes due of $52,500. Taxable incomes were reported for 1996, 1997 and 1998. The company had a deferred tax asset balance of $20,025 at 12/31/98. Sesame Corp. implements the provisions of SFAS #109 for the year ended 12/31/99 for the first time.

2. On Jan. 2, 1997, equipment was purchased at a cost of $225,000. The equipment had an estimated useful life of five years and no salvage value. The MACRS (5-year) method of recovery was used for income tax reporting and the straight-line method was used on the financial statements.

3. On Jan. 8, 1998, $60,000 was collected in advance rental of a building for a three-year period. The $60,000 was reported as taxable income in 1998, but $40,000 was reported as deferred revenue in 1998 in the financial statements. The building will continue to be rented for the foreseeable future.

4. On Jan. 5, 1999, office equipment was purchased for $10,000. The office equipment has an estimated life of 10 years and no salvage value. Straight-line depreciation was used for both financial and income tax reporting purposes. Management, however, elected to write off $5,000 of the cost of the equipment for income tax purposes in 1999 and use straight-line over 5 years for the remaining $5,000 cost. As a result, the total depreciation for this equipment on the tax return was $5,500. (Half-year convention is used).

5. On Feb. 12, 1999, the Corporation sold land with a book and tax basis of $150,000 for $200,000. The gain, reported in full in 1999 on the financial statements, was reported by the installment method on the income tax return equally over a period of 5 years.

6. On Mar. 15, 1999, a patent developed at a cost of $34,000 was granted. The Corporation is amortizing the patent
over a period of 4 years on the financial statements and over 17 years on its income tax return. The Corporation elected to record a full year's amortization in 1999 on both its financial statements and income tax return.

7. The income tax rates for 1997, 1998 and 1999 are assumed to be 30% for each year.

Required:

a. For each item causing a temporary difference, prepare a schedule showing the taxable or deductible amount for each year.
b. Prepare a schedule showing the taxable and deductible amounts for 1999 for each item.
c. Compute the deferred tax asset and liability at 12/31/99.
d. Compute the 1999 income tax expense.

Solution:

a. Net taxable or deductible amounts:

(2) Equipment

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax (MACRS)</td>
<td>$45,000</td>
<td>$72,000</td>
<td>$43,200</td>
<td>$25,920</td>
<td>$25,920</td>
<td>$12,960</td>
</tr>
<tr>
<td>Book (S.L.)</td>
<td>45,000</td>
<td>45,000</td>
<td>45,000</td>
<td>45,000</td>
<td>45,000</td>
<td>-0-</td>
</tr>
<tr>
<td>Difference</td>
<td>$0</td>
<td>$27,000</td>
<td>$(1,800)</td>
<td>$(19,080)</td>
<td>$(19,080)</td>
<td>$12,960</td>
</tr>
<tr>
<td>Taxable amounts</td>
<td>$1,800</td>
<td>$19,080</td>
<td>$19,080</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deductible amounts</td>
<td>$27,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(3) Rental receipts

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book income</td>
<td>$20,000</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Tax income</td>
<td>60,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>$(40,000)</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Deductible amount</td>
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(4) Office equipment

<table>
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<tr>
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<td>$1,000</td>
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<td>$1,000</td>
<td>$500</td>
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(5) Installment gain:

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(6) Patent

<table>
<thead>
<tr>
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<th>2000</th>
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<tbody>
<tr>
<td>Tax amortization</td>
<td>$2,000</td>
<td>$2,000</td>
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<td>$2,000</td>
<td>$2,000</td>
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<td>$2,000</td>
<td>$18,000</td>
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<tr>
<td>Book amortization</td>
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<tr>
<td>Difference</td>
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<td>$6,500</td>
<td>$6,500</td>
<td>$6,500</td>
<td>$(2,000)</td>
<td>$(2,000)</td>
<td>$(2,000)</td>
<td>$(2,000)</td>
<td>$(2,000)</td>
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<tr>
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<td>$6,500</td>
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<td>$6,500</td>
<td>$6,500</td>
<td>$(2,000)</td>
<td>$(2,000)</td>
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<tr>
<td>Deductible amounts</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$18,000</td>
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</table>
b. Taxable and deductible amounts for 1999:

<table>
<thead>
<tr>
<th></th>
<th>Taxable</th>
<th>Deductible</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Equipment $27,000 – $1,800</td>
<td></td>
<td>$25,200</td>
</tr>
<tr>
<td>(3) Rental income $40,000 – $20,000</td>
<td></td>
<td>$20,000</td>
</tr>
<tr>
<td>(4) Office equipment</td>
<td></td>
<td>4,500</td>
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<tr>
<td>(5) Installment gain</td>
<td></td>
<td>40,000</td>
</tr>
<tr>
<td>(6) Patent</td>
<td>6,500</td>
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</tr>
</tbody>
</table>

c. Deferred tax balances:

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Totals</td>
<td>$26,500</td>
<td>$69,700</td>
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<tr>
<td>Tax rate</td>
<td>30%</td>
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<tr>
<td>Asset</td>
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<td></td>
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<tr>
<td>Liability</td>
<td></td>
<td>$20,910</td>
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<tr>
<td>Current portion:</td>
<td>$20,000 × .3 =</td>
<td>$6,000</td>
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</table>

d. Income tax expense for 1999:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Income tax payable</td>
<td>$52,500</td>
</tr>
<tr>
<td>Change in deferred tax accounts:</td>
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</tr>
<tr>
<td>Liability at 12/31/99</td>
<td>$20,910</td>
</tr>
<tr>
<td>Asset</td>
<td>$7,950</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>$65,460</td>
</tr>
</tbody>
</table>

**Note:** The $20,025 deferred tax asset balance at 12/31/98 would be shown on the income statement at 12/31/99 as an accounting change due to the implementation of a new accounting standard in accordance with APB 20.

**UNDISTRIBUTED EARNINGS — INVESTEEL AND SUBSIDIARY**

An additional deferred tax problem relates to the temporary difference between the earnings of an investee or subsidiary accounted for by the equity method and a dividend distributed by them. The tax effect of this temporary difference depends upon whether the temporary difference will ultimately be distributed as future dividends or future capital gains. If the assumption is made that the temporary difference (undistributed earnings) is to be distributed as future dividends and the corporation is a domestic corporation, the tax effect of the temporary difference would normally be adjusted for the dividends received deduction.

**Example - Deferred tax effects of domestic investee**

ABC Corp. owns 30% of the outstanding stock of Investee Corp., a domestic corporation. ABC’s net income for the current year is $60,000 and its dividends are $20,000. The Company accounts for its investment on the equity basis and assumes that future distributions of undistributed earnings will be as dividends. The tax rate for all years is assumed to be 40%.

**Solution:**

ABC’s income before taxes would include $18,000 of income from earnings of investee ($60,000 × 30%). The company would also receive $6,000 in dividends from Investee ($20,000 × 30%). This creates a temporary difference between the earnings and dividends of $12,000. Since the Company assumes that the difference will be distributed as future dividends, it is eligible for the 80% dividends received deduction. This means that 80% of the $12,000 temporary difference ($9,600) will never be taxed and is considered a permanent difference. Therefore, only 20% of the $12,000 temporary difference ($2,400) will be taxable. The deferred tax liability on ABC’s books from the temporary difference will be $960 ($2,400 × 40%).

13-11
Note: The rule for the 80% dividends received deduction is that the investment must be in a domestic corporation and that the ownership percentage must be equal to or greater than 20% but less than 80%. For investments in a domestic corporation in which the ownership is less than 20%, a 70% dividends received deduction is allowed. This investment would normally be accounted for by using the cost method and the company would recognize dividend income for both financial and tax purposes. In this case, a temporary tax difference would not exist.

Example - Deferred tax effects of a domestic subsidiary
ABC also owns 60% interest in Subsidiary Corp., a domestic corporation. Subsidiary’s net income and dividends for the current year are $100,000 and $40,000 respectively. ABC accounts for its investment on the equity basis and assumes that all undistributed earnings will be distributed as dividends. The tax rate for all years is 40%.

Solution:
ABC’s income before taxes would include earnings from Subsidiary Corp. of $60,000 ($100,000 × 60%), and dividends of $24,000 ($40,000 × 60%). This creates a temporary difference between earnings and dividends of $36,000. Since ABC is a domestic corporation and the ownership interest is between 20% or more and less than 80%, it is eligible for the 80% dividend received deduction. Therefore, 80% of the temporary difference (undistributed earnings) will never be taxed and is considered a permanent difference. Only 20% of the temporary difference is considered taxable. The deferred tax liability on ABC’s books would be $2,880: the temporary difference ($36,000) times 20% times the future enacted tax rate of 40%.

Note: The dividends received deduction is 100% for investments in domestic corporations in which the ownership percentage is 80% or above. This means that 100% of the dividends would never be taxed and would be considered a permanent difference. In this case, the company would not have a temporary tax difference.

DIFFERING VIEWPOINTS

1. Asset and liability method (method to be used)
2. "Deferred" method
3. Net of tax method

The asset and liability approach to deferred taxes is most consistent with the definitions established in the Concepts Statements for assets and liabilities. This method recognizes a deferred tax liability (or asset) which represents the amount of taxes payable or recoverable in future years as a result of temporary differences at the end of the current year. This method emphasizes those rates in effect when the tax difference reverses (future rates).

In the deferred method, the tax effects of income tax allocation are deferred currently and current tax rates are used. If the current taxes are reduced below the income tax expense per books, a deferred credit arises. Similarly, where income tax payable exceeds the income tax expense, a deferred charge arises. In this method, the emphasis is on the income statement and matches tax expense with related revenues and expenses for the year in which they are recognized in pretax financial income.

The label "deferred" or "liability" is really the principal difference between the first two methods. One other difference relates to tax rates. In the deferred method, current tax rates are used; whereas, in the liability method, rates expected to prevail when the differences reverse are used. In the "net of tax" method, the tax effects under either the deferred or liability method are recognized in the valuation of assets and liabilities and the related revenues and expenses. The tax effects are applied to reduce specific assets or liabilities on the basis that tax deductibility or taxability are factors in their valuation.

Another viewpoint, partial allocation, is not acceptable. Partial allocation advocates maintain that the tax expense should be the tax payable with the possible exception of non recurring differences that lead to material distortions of tax expense and net income. Holders of this view state that comprehensive tax allocation advocates rely on the "revolving" account approach which suggests a similarity between deferred tax accruals and other balance sheet items, like accounts payable, where the individual items within an account balance remain constant or grow. They argue that deferred tax accruals are not owed to anyone, there is no payable date, and represent at best vague estimates of future amounts due depending on future tax rates and other factors.
INTRAPERIOD TAX ALLOCATION

- **Income Statement**
Income tax expense or benefit for the year shall be allocated among continuing operations, discontinued operations, extraordinary items, and changes in accounting principles. The amount allocated to continuing operations is the tax effect of the pretax income or loss from continuing operations that occurred during the year, plus or minus income tax effects of changes in circumstances that cause a change in judgment about the realization of deferred tax assets in future years, changes in tax laws or rates, and changes in tax status.

If there is only one item other than continuing operations, the portion of income tax expense or benefit for the year that remains after the allocation to continuing operations is allocated to that item. If there are two or more items other than continuing operations, the amount that remains after the allocation to continuing operations shall be allocated among those other items in proportion to their individual effects on income tax expense or benefit for the year.

- **Comprehensive Income**
  a. Other comprehensive items are shown net of tax effects or before tax effects with one amount shown for the total tax. (See Chapter 12)
  b. Accumulated other comprehensive income shown in the equity section of the statement of financial position is shown net of tax. (See Chapter 12)

- **Stockholder’s Equity**
Accounting errors are shown net of tax as adjustments to beginning retained earnings.

**CHAPTER OVERVIEW**

**EXAMPLES OF TEMPORARY DIFFERENCES**

<table>
<thead>
<tr>
<th>TRANSACTIONS</th>
<th>FINANCIAL REPORTING</th>
<th>IRS – TAX REPORTING</th>
<th>FINANCIAL IBT* IS &gt; &lt; TAXABLE IBT</th>
<th>DEFERRED TAX</th>
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<tbody>
<tr>
<td>1. Sales</td>
<td>Accrual</td>
<td>Installment</td>
<td>Greater</td>
<td>Liability</td>
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<td>2. Long-term Contracts</td>
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<td>Liability</td>
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<tr>
<td>3. Investments</td>
<td>Equity</td>
<td>Cost</td>
<td>Greater</td>
<td>Liability</td>
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<tr>
<td>4. Depreciation</td>
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<td>SYD</td>
<td>Greater</td>
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<td>5. Prepaid Expenses</td>
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<td>Cash</td>
<td>Greater</td>
<td>Liability</td>
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<tr>
<td>6. Rent Received in Advance</td>
<td>Accrual</td>
<td>Cash</td>
<td>Less</td>
<td>Asset</td>
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<td>7. Subscriptions Received in Advance</td>
<td>Accrual</td>
<td>Cash</td>
<td>Less</td>
<td>Asset</td>
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<td>8. Warranty Cost</td>
<td>Accrual</td>
<td>Cash</td>
<td>Less</td>
<td>Asset</td>
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<tr>
<td>9. Estimated Litigation Losses</td>
<td>Accrual</td>
<td>Cash</td>
<td>Less</td>
<td>Asset</td>
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<tr>
<td>10. Unrealized Loss on Marketable Securities</td>
<td>Accrual</td>
<td>Cash</td>
<td>Less</td>
<td>Asset</td>
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</table>

*Income Before Taxes
**IFRS - DEFERRED TAXES**

In general deferred taxes for US GAAP and IFRS are similar with a few minor differences. IFRS requires the use of the "liability method" for deferred taxes. This method, like the US, focuses on balance sheet presentation. Unlike the US, IFRS requires that all deferred tax accounts be classified as non current. The deferred tax rates used to determine the amount of the deferred taxes are the future enacted or substantially tax rates in the period in which the temporary difference will reverse. The term substantially enacted means "virtually certain".

The other difference relates to the netting of the deferred tax accounts. Under US GAAP the netting of current deferred tax assets vs current deferred tax liabilities or non current deferred tax assets vs noncurrent deferred tax liabilities is required. Under IFRS netting is permitted if allowed by the taxing authority of the country in which the entity is located.

**FAST TRACK SUMMARY**

<table>
<thead>
<tr>
<th></th>
<th>IFRS</th>
<th>US GAAP</th>
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<tbody>
<tr>
<td>Deferred Tax Theory</td>
<td>Liability Method</td>
<td>Liability on Balance</td>
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<td></td>
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<td>rates</td>
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<td>Netting of Deferred</td>
<td>If permitted by taxing</td>
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<td>Tax Accounts</td>
<td>Authority of the country</td>
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Chapter Thirteen
Accounting for Income Taxes Questions

The following former CPA exam questions and problems have been modified for compliance with ASC 740 where necessary. In any questions with potential deferred tax assets, it should be assumed that a valuation allowance is not required unless specifically mentioned in the question or problem.

TEMPORARY DIFFERENCES; DEFERRED TAX LIABILITY

1. Tower Corp. began operations on January 1, 1997. For financial reporting, Tower recognizes revenues from all sales under the accrual method. However, in its income tax returns, Tower reports qualifying sales under the installment method. Tower’s gross profit on these installment sales under each method was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Accrual method</th>
<th>Installment method</th>
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<tbody>
<tr>
<td>1997</td>
<td>$1,600,000</td>
<td>$600,000</td>
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<tr>
<td>1998</td>
<td>2,600,000</td>
<td>1,400,000</td>
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</tbody>
</table>

The income tax rate is 30% for 1997 and future years. There are no other temporary or permanent differences. In its December 31, 1998, balance sheet, what amount should Tower report as a liability for deferred income taxes?

a. $840,000  
b. $660,000  
c. $600,000  
d. $360,000

2. Huff Corp. began operations on January 1, 1998. Huff recognizes revenues from all sales under the accrual method for financial reporting purposes and appropriately uses the installment method for income tax purposes. Huff’s gross margin on installment sales under each method was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Accrual method</th>
<th>Installment method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$800,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>1999</td>
<td>1,300,000</td>
<td>700,000</td>
</tr>
</tbody>
</table>

Enacted income tax rates are 30% for 1999 and 25% thereafter. There are no other temporary differences. In Huff’s December 31, 1999, balance sheet, the deferred income tax liability should be

a. $150,000  
b. $180,000  
c. $275,000  
d. $330,000

3. Scott Corp. received cash of $20,000 that was included in revenues in its 1999 financial statements, of which $12,000 will not be taxable until 2000. Scott's enacted tax rate is 30% for 1999, and 25% for 2000. What amount should Scott report in its 1999 balance sheet for deferred income tax liability?

a. $2,000  
b. $2,400  
c. $3,000  
d. $3,600

CURRENT TAX LIABILITY OR CURRENT PORTION OF TAX EXPENSE

4. On January 2, 1999, Ross Co. purchased a machine for $70,000. This machine has a 5-year useful life, a residual value of $10,000, and is depreciated using the straight-line method for financial statement purposes. For tax purposes, depreciation expense was $25,000 for 1999 and $20,000 for 2000. Ross’ 2000 income, before income taxes and depreciation expense, was $100,000 and its tax rate was 30%. If Ross had made no estimated tax payments during 2000, what amount of current income tax liability would Ross report in its December 31, 2000, balance sheet?

a. $26,400  
b. $25,800  
c. $24,000  
d. $22,500
5. For the year ended December 31, 2001, Tyre Co. reported pretax financial statement income of $750,000. Its taxable income was $650,000. The difference is due to accelerated depreciation for income tax purposes. Tyre's effective income tax rate is 30%, and Tyre made estimated tax payments during 2001 of $90,000. What amount should Tyre report as current income tax expense for 2001?
   a. $105,000  
   b. $135,000  
   c. $195,000  
   d. $225,000

6. Pine Corp.'s books showed pretax income of $800,000 for the year ended December 31, 1996. In the computation of federal income taxes, the following data were considered:
   Gain on an involuntary conversion $350,000
   (Pine has elected to replace the property within the statutory period using total proceeds.)
   Depreciation deducted for tax purposes in excess of depreciation deducted for book purposes 50,000
   Federal estimated tax payments, 1996 70,000
   Enacted federal tax rate, 1996 30%

What amount should Pine report as its current federal income tax liability on its December 31, 1996, balance sheet?
   a. $50,000  
   b. $65,000  
   c. $120,000  
   d. $135,000

**COMBINATION OF PERMANENT AND TEMPORARY DIFFERENCES**

7. For the year ended December 31, 1998, Mont Co.'s books showed income of $600,000 before provision for income tax expense. To compute taxable income for federal income tax purposes, the following items should be noted:
   Income from exempt municipal bonds $  60,000
   Depreciation deducted for tax purposes in excess of depreciation recorded on the books 120,000
   Proceeds received from life insurance on death of officer 100,000
   Estimated tax payments 0
   Enacted corporate tax rate 30%

   Ignoring the alternative minimum tax provisions, what amount should Mont report at December 31, 1998, as its current federal income tax liability?
   a. $96,000  
   b. $114,000  
   c. $150,000  
   d. $162,000

8. Stone Co. began operations in 1999 and reported $225,000 in income before income taxes for the year. Stone’s 1999 tax depreciation exceeded its book depreciation by $25,000. Stone also had nondeductible book expenses of $10,000 related to permanent differences. Stone’s tax rate for 1999 was 40%, and the enacted rate for years after 1999 is 35%. In its December 31, 1999, balance sheet, what amount of deferred income tax liability should Stone report?
   a. $8,750  
   b. $10,000  
   c. $12,250  
   d. $14,000

---

**Items 9 and 10 are based on the following:**
Kent, Inc.’s reconciliation between financial statement and taxable income for 2000 follows:

<table>
<thead>
<tr>
<th>Pretax financial income</th>
<th>$150,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent difference</td>
<td>(12,000)</td>
</tr>
<tr>
<td>Temporary difference - depreciation</td>
<td>(9,000)</td>
</tr>
<tr>
<td>Taxable income</td>
<td>$129,000</td>
</tr>
</tbody>
</table>

**Additional information:**

| Cumulative temporary differences (future taxable amounts) | $11,000 | $20,000 |

The enacted tax rate was 34% for 1999, and 40% for 2000 and years thereafter.

9. In its December 31, 2000, balance sheet, what amount should Kent report as deferred income tax liability?
   a. $3,600  
   b. $6,800  
   c. $7,340  
   d. $8,000

10. In its 2000 income statement, what amount
should Kent report as current portion of income tax expense?
   a. $51,600
   b. $55,200
   c. $55,800
   d. $60,000

---

**Items 11 and 12** are based on the following:
Bee Corp. prepared the following reconciliation between book income and taxable income for the year ended December 31, 1999:

<table>
<thead>
<tr>
<th>Pretax accounting income</th>
<th>$500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxable income</td>
<td>$300,000</td>
</tr>
<tr>
<td>Difference</td>
<td>$200,000</td>
</tr>
</tbody>
</table>

Differences:
- Interest on municipal bonds: $50,000
- Lower depreciation per financial statements: $150,000

Total differences: $200,000

Bee's effective income tax rate for 1999 is 30%. The depreciation difference will reverse equally over the next three years at enacted tax rates as follows:

<table>
<thead>
<tr>
<th>Years</th>
<th>Tax rates</th>
</tr>
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<tbody>
<tr>
<td>2000</td>
<td>30%</td>
</tr>
<tr>
<td>2001</td>
<td>25%</td>
</tr>
<tr>
<td>2002</td>
<td>25%</td>
</tr>
</tbody>
</table>

11. In Bee's 1999 income statement, the current portion of its provision for income taxes should be
   a. $150,000
   b. $125,000
   c. $90,000
   d. $75,000

12. In Bee's 1999 income statement, the deferred portion of its provision for income taxes should be
   a. $60,000
   b. $50,000
   c. $45,000
   d. $40,000

---

**Deferred Tax Asset**

13. Quinn Co. reported a net deferred tax asset of $9,000 in its December 31, 2000, balance sheet. For 2001, Quinn reported pretax financial statement income of $300,000. Temporary differences of $100,000 resulted in taxable income of $200,000 for 2001. At December 31, 2001, Quinn had cumulative taxable differences of $70,000. Quinn's effective income tax rate is 30%. In its December 31, 2001, income statement, what should Quinn report as deferred income tax expense?
   a. $12,000
   b. $21,000
   c. $30,000
   d. $60,000

14. On its December 31, 2001, balance sheet, Shin Co. had income taxes payable of $13,000 and a current deferred tax asset of $20,000 before determining the need for a valuation account. Shin had reported a current deferred tax asset of $15,000 at December 31, 2000. No estimated tax payments were made during 2001. At December 31, 2001, Shin determined that it was more likely than not that 10% of the deferred tax asset would not be realized. In its 2001 income statement, what amount should Shin report as total income tax expense?
   a. $8,000
   b. $8,500
   c. $10,000
   d. $13,000

15. West Corp. leased a building and received the $36,000 annual rental payment on June 15, 1999. The beginning of the lease was July 1, 1999. Rental income is taxable when received. West's tax rates are 30% for 1999 and 40% thereafter. West had no other permanent or temporary differences. West determined that no valuation allowance was needed. What amount of deferred tax asset should West report in its December 31, 1999, balance sheet?
   a. $5,400
   b. $7,200
   c. $10,800
   d. $14,400
16. At December 31, 2001, Bren Co. had the following deferred income tax items:

- A deferred income tax liability of $15,000 related to a noncurrent asset
- A deferred income tax asset of $3,000 related to a noncurrent liability
- A deferred income tax asset of $8,000 related to a current liability

Which of the following should Bren report in the noncurrent section of its December 31, 2001, balance sheet?

a. A noncurrent asset of $3,000 and a noncurrent liability of $15,000.
b. A noncurrent liability of $12,000.
c. A noncurrent asset of $11,000 and a noncurrent liability of $15,000.
d. A noncurrent liability of $4,000.

17. In 1999, Rand, Inc., reported for financial statement purposes the following items, which were not included in taxable income:

Installment gain to be collected equally in 2000 through 2002 $1,500,000
Estimated future warranty costs to be paid equally in 2000 through 2002 2,100,000

Rand has paid income taxes in the amount of $900,000 for the three year period ended December 31, 1999. There were no temporary differences in prior years. Rand's enacted tax rates are 30% for 1999 and 25% for 2000 through 2002.

In Rand's December 31, 1999, balance sheet, what amounts of the deferred tax asset should be classified as current and noncurrent?

18. Thorn Co. applies ASC 740, Accounting for Income Taxes. At the end of 2000, the tax effects of temporary differences were as follows:

<table>
<thead>
<tr>
<th>Deferred tax assets</th>
<th>Related asset classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerated tax depreciation</td>
<td>($75,000)</td>
</tr>
<tr>
<td>Additional costs in inventory for tax purposes</td>
<td>25,000</td>
</tr>
</tbody>
</table>

A valuation allowance was not considered necessary. Thorn anticipates that $10,000 of the deferred tax liability will reverse in 2001. In Thorn's December 31, 2000, balance sheet, what amount should Thorn report as noncurrent deferred tax liability?

a. $40,000
b. $50,000
c. $65,000
d. $75,000

19. Because Jab Co. uses different methods to depreciate equipment for financial statement and income tax purposes, Jab has temporary differences that will reverse during the next year and add to taxable income. Deferred income taxes that are based on these temporary differences should be classified in Jab's balance sheet as a

a. Contra account to current assets.
b. Contra account to noncurrent assets.
c. Current liability.
d. Noncurrent liability.

20. Temporary differences arise when expenses are deductible for tax purposes

<table>
<thead>
<tr>
<th>After they are recognized in financial income</th>
<th>Before they are recognized in financial income</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
21. Rein Inc. reported deferred tax assets and deferred tax liabilities at the end of 1997 and at the end of 1998. According to ASC 740, Accounting for Income Taxes, for the year ended 1998 Rein should report deferred income tax expense or benefit equal to the
a. Decrease in the deferred tax assets.
b. Increase in the deferred tax liabilities.
c. Amount of the current tax liability plus the sum of the net changes in deferred tax assets and deferred tax liabilities.
d. Sum of the net changes in deferred tax assets and deferred tax liabilities.

22. The liability method of accounting for deferred income taxes should be used for

<table>
<thead>
<tr>
<th>Intraperiod income tax allocation</th>
<th>Permanent differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
</tr>
<tr>
<td>d. No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

23. Orleans Co., a cash basis taxpayer, prepares accrual basis financial statements. Since 1999, Orleans has applied ASC 740, Accounting for Income Taxes. In its 2000 balance sheet, Orleans' deferred income tax liabilities increased compared to 1999. Which of the following changes would cause this increase in deferred income tax liabilities?
I. An increase in prepaid insurance.
II. An increase in rent receivable.
III. An increase in warranty obligations.

a. I only.
b. I and II.
c. II and III.
d. III only.

**TAX POSITIONS**

24. In reviewing a tax position an entity considers the possibility that it will be sustained upon examination. What criterion is used in evaluating this decision?

<table>
<thead>
<tr>
<th>Possible Outcome</th>
<th>Individual Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,000</td>
<td>5%</td>
</tr>
<tr>
<td>$1,600</td>
<td>15%</td>
</tr>
<tr>
<td>$1,200</td>
<td>20%</td>
</tr>
<tr>
<td>$1,000</td>
<td>40%</td>
</tr>
<tr>
<td>$800</td>
<td>20%</td>
</tr>
</tbody>
</table>

25. The Cook Company is considering a tax position that qualifies as “more likely than not” to occur, but is uncertain of its possible outcome. So it adopts ASC 740’s cumulative probability approach to determine the amount to accrue. Using the following data, what amount should Cook use?

a. 1,000
b. 1,600
c. 1,200
d. 800

**INVESTEE UNDISTRIBUTED EARNINGS**

26. Rico Corp. owns 40% of Dee Corp.’s voting common stock and accounts for its investment using the equity method. During 1999, Dee reported earnings of $225,000 and paid dividends of $75,000. Rico assumes that all of Dee's undistributed earnings will be distributed as dividends in future years. Rico’s income tax rate is 30%. Rico elected early application of ASC 740, Accounting for Income Taxes. Ignoring the dividends received deduction, what amount of deferred income tax liability should Rico report in its 1999 financial statements?

a. $27,000
b. $18,000
c. $9,000
d. $0

27. Taft Corp. uses the equity method to account for its 25% investment in Flame, Inc. During 1999, Taft received dividends of $30,000 from Flame and recorded $180,000 as its equity in the earnings of Flame. Additional information follows:

- All the undistributed earnings of Flame will be distributed as dividends in future periods.
- The dividends received from Flame are eligible for the 80% dividends received deduction.
- There are no other temporary differences.
- Enacted income tax rates are 30% for 1999 and thereafter.
In its December 31, 1999, balance sheet, what amount should Taft report for deferred income tax liability?
  a. $9,000  
  b. $10,800  
  c. $45,000  
  d. $54,000

**LOSS CARRYBACKS AND CARRYFORWARDS**

28. Mobe Co. reported the following operating income (loss) for its first three years of operations:

<table>
<thead>
<tr>
<th>Year</th>
<th>Income/loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>$300,000</td>
</tr>
<tr>
<td>2000</td>
<td>(700,000)</td>
</tr>
<tr>
<td>2001</td>
<td>$1,200,000</td>
</tr>
</tbody>
</table>

For each year, there were no deferred income taxes, and Mobe's effective income tax rate was 30%. In its 2000 income tax return, Mobe elected to carry back the maximum amount of loss possible. In its 2001 income statement, what amount should Mobe report as total income tax expense?
  a. $120,000  
  b. $150,000  
  c. $240,000  
  d. $360,000

29. Bishop Corporation began operations in 1997 and had operating losses of $200,000 in 1997 and $150,000 in 1998. For the year ended December 31, 1999, Bishop had pretax book income of $300,000. For the three-year period 1997 to 1999, assume an income tax rate of 40% and no permanent or temporary differences between book and taxable income. In Bishop’s 1999 income statement, how much should be reported as total income tax expense?
  a. $0  
  b. $40,000  
  c. $60,000  
  d. $120,000

30. Town, a calendar-year corporation incorporated in January 1996, experienced a $600,000 net operating loss (NOL) in 1999. For the years 1997 - 1998, Town reported a taxable income in each year, and a total of $450,000 for the two years. Assume that: (1) there is no difference between pretax accounting income and taxable income for all years, (2) the income tax rate is 40% for all years, (3) the NOL will be carried back to the profit years 1997 - 1998 to the extent of $450,000, and $150,000 will be carried forward to future periods. Town believes that it is more likely than not that the full tax benefit of the loss carryforward will be realized. In its 1999 income statement, what amount should Town report as the reduction of loss due to NOL carryback and carryforward?
  a. $180,000  
  b. $240,000  
  c. $270,000  
  d. $360,000

**INTRAPERIOD TAX ALLOCATIONS**

31. Which of the following is not affected by tax allocation within a period?
   a. Income before extraordinary items.  
   b. Extraordinary items.  
   c. Adjustments of prior periods.  
   d. Operating revenues.

32. Which of the following requires intra-period tax allocation?
   a. That portion of dividends reduced by the dividends received deduction by corporations under existing federal income tax law.  
   b. The excess of accelerated depreciation used for tax purposes over straight-line depreciation used for financial reporting purposes.  
   c. Extraordinary gains or losses as defined by the Accounting Principles Board.  
   d. All differences between taxable income and financial statement earnings.

33. The amount of income tax applicable to transactions that must be reported using intraperiod income tax allocation is computed
   a. By multiplying the item by the effective income tax rate.  
   b. As the difference between the tax computed based on taxable income without including the item and the tax computed based on taxable income including the item.  
   c. As the difference between the tax computed on the item based on the amount used for financial reporting and the amount used in computing taxable income.  
   d. By multiplying the item by the difference between the effective income tax rate and the statutory income tax rate.
REVIEW QUESTIONS

34. An example of intraperiod income tax allocation is
a. Interest income on municipal obligations.
b. Estimated expenses for major repairs accrued for financial statement purposes in one year, but deducted for income tax purposes when paid in a subsequent year.
c. Rental income included in income for income tax purposes when collected, but deferred for financial statement purposes until earned in a subsequent year.
d. Reporting the cumulative effect on prior years of changing to a different depreciation method in the income statement, net of direct tax effects.

Items 35 and 36 are based on the following:
Venus Corp.’s worksheet for calculating current and deferred income taxes for 1999 follows:

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretax income</td>
<td>1,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary differences:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>(800)</td>
<td>(1,200)</td>
<td>$2,000</td>
</tr>
<tr>
<td>Warranty costs</td>
<td>400</td>
<td>(100)</td>
<td>(300)</td>
</tr>
<tr>
<td>Taxable income</td>
<td>$1,000</td>
<td>(1,300)</td>
<td>1,700</td>
</tr>
<tr>
<td>Enacted rate</td>
<td>30%</td>
<td>30%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Venus had no prior deferred tax balances. In its 1999 income statement, what amount should Venus report as:

35. Current income tax expense?
a. $420
b. $350
c. $300
d. $0

36. Deferred income tax expense?
a. $350
b. $300
c. $120
d. $95

37. On December 31, 1999, Oak Co. recognized a receivable for taxes paid in prior years and refundable through the carryback of all of its 1999 operating loss. Also, Oak had a 1999 deferred tax liability derived from the temporary difference between tax and financial statement depreciation, which reverses over the period 2000-2004. The amount of this tax liability is less than the amount of the tax asset. Which of the following 1999 balance sheet sections should report tax-related items in accordance with ASC 740, Accounting for Income Taxes?
I. Current assets.
II. Current liabilities.
III. Noncurrent liabilities.
a. I only.
b. I and III.
c. I, II, and III.
d. II and III.

38. Leer Corp.’s pretax income in 1997 was $100,000. The temporary differences between amounts reported in the financial statements and the tax return are as follows:
- Depreciation in the financial statements was $8,000 more than tax depreciation.
- The equity method of accounting resulting in financial statement income of $35,000. A $25,000 dividend was received during the year, which is eligible for the 80% dividends received deduction.

Leer’s effective income tax rate was 30% in 1997. In its 1997 income statement, Leer should report a current provision for income taxes of
a. $26,400
b. $23,400
c. $21,900
d. $18,600

39. In its 1999 income statement, Noll Corp. reported depreciation of $400,000 and interest revenue on municipal obligations of $60,000. Noll reported depreciation of $550,000 on its 1999 income tax return. The difference in depreciation is the only temporary difference, and it will reverse equally over the next three years. Noll's enacted income tax rates are 35% for 1999, 30% for 2000 and 25% for 2001 and 2002.

What amount should be included in the deferred income tax liability in Noll's December 31, 1999, balance sheet?
a. $40,000
b. $52,500
c. $63,000
d. $73,500
40. For the year ended December 31, 2000, Grim Co.'s pretax financial statement income was $200,000 and its taxable income was $150,000. The difference is due to the following:

- Interest on municipal bonds $70,000
- Premium expense on keyperson life insurance $(20,000)

Total $50,000

Grim's enacted income tax rate is 30%. In its 2000 income statement, what amount should Grim report as current provision for income tax expense?

a. $45,000.
b. $51,000.
c. $60,000.
d. $66,000.

41. Dix, Inc., a calendar-year corporation, reported the following operating income (loss) before income tax for its first three years of operations:

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating Income (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>$100,000</td>
</tr>
<tr>
<td>1998</td>
<td>$(200,000)</td>
</tr>
<tr>
<td>1999</td>
<td>$400,000</td>
</tr>
</tbody>
</table>

There are no permanent or temporary differences between operating income (loss) for financial and income tax reporting purposes. When filing its 1998 tax return, Dix did not elect to forego the carryback of its loss for 1998. Assume a 40% tax rate for all years. What amount should Dix report as its income tax liability at December 31, 1999?

a. $160,000
b. $120,000
c. $80,000
d. $60,000

42. Bart, Inc., a newly organized corporation, uses the equity method of accounting for its 30% investment in Rex Co.'s common stock. During 1999, Rex paid dividends of $300,000 and reported earnings of $900,000. In addition:

- The dividends received from Rex are eligible for the 80% dividends received deduction.
- All the undistributed earnings of Rex will be distributed in future years.
- There are no other temporary differences.
- Bart’s 1999 income tax rate is 30%.
- The enacted income tax rate after 1999 is 25%.

In Bart’s December 31, 1999, balance sheet, the deferred income tax liability should be

a. $10,800
b. $9,000
c. $5,400
d. $4,500

43. Cahn Co. applies straight-line amortization to its trademark costs for both income taxes and financial statement reporting. However, for tax purposes a 5-year period is used and for financial statement purposes a 10-year period is used. Cahn has no other temporary differences, has an operating cycle of less than 1 year, and has taxable income in all years. Cahn should report both current and noncurrent deferred income tax liabilities at the end of

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>Yes</td>
</tr>
<tr>
<td>b. No</td>
<td>No</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

44. Rom Corp. began business in 1999 and reported taxable income of $50,000 on its 1999 tax return. Rom's enacted tax rate is 30% for 1999 and future years. The following is a schedule of Rom's December 31, 1999, temporary differences in thousands of dollars:

<table>
<thead>
<tr>
<th>12/31/99</th>
<th>Future taxable (deductible) amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book basis over (under) tax basis</td>
<td>2000</td>
</tr>
<tr>
<td>Equipment liability 10</td>
<td>(5)</td>
</tr>
<tr>
<td>Warranty liability (20)</td>
<td>(10)</td>
</tr>
<tr>
<td>Deferred compensation liability (15)</td>
<td>(5)</td>
</tr>
<tr>
<td>Installment receivables 30</td>
<td>10</td>
</tr>
<tr>
<td>Totals 35</td>
<td>(5)</td>
</tr>
</tbody>
</table>

What amount should Rom report as current deferred tax assets in its December 31, 1999, balance sheet?

a. $0
b. $1,500
c. $4,500
d. $6,000
Items 45 through 47 are based on the following:
The following trial balance of Shaw Corp. at December 31, 1999, has been adjusted except for income tax expense.

Shaw Corp.
TRIAL BALANCE
December 31, 1999

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 675,000</td>
</tr>
<tr>
<td>Accounts receivable (net)</td>
<td>2,695,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>2,185,000</td>
</tr>
<tr>
<td>Property, plant and equipment (net)</td>
<td>7,366,000</td>
</tr>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td>$1,801,000</td>
</tr>
<tr>
<td>Income tax payable</td>
<td>654,000</td>
</tr>
<tr>
<td>Deferred income tax liability</td>
<td>85,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>2,300,000</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>3,680,000</td>
</tr>
<tr>
<td>Retained earnings, 1/1/99</td>
<td>3,350,000</td>
</tr>
<tr>
<td>Net sales and other revenues</td>
<td>13,360,000</td>
</tr>
<tr>
<td>Costs and expenses</td>
<td>11,180,000</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>$1,129,000</td>
</tr>
<tr>
<td><strong>$25,230,000</strong></td>
<td><strong>$25,230,000</strong></td>
</tr>
</tbody>
</table>

During the year, estimated tax payments of $475,000 were charged to income tax expense. The current and future tax rate on all types of income is 30%.

In Shaw's December 31, 1999, balance sheet,

45. The current assets total is
   a. $6,030,000
   b. $5,555,000
   c. $5,530,000
   d. $5,055,000

46. The current liabilities total is
   a. $1,995,000
   b. $2,065,000
   c. $2,470,000
   d. $2,540,000

47. The final retained earnings balance is
   a. $4,401,000
   b. $4,486,000
   c. $4,876,000
   d. $5,055,000

48. As a result of differences between depreciation for financial reporting purposes and tax purposes, the financial reporting basis of Noor Co.'s sole depreciable asset, acquired in 2001, exceeded its tax basis by $250,000 at December 31, 2001. This difference will reverse in future years. The enacted tax rate is 30% for 2001, and 40% for future years. Noor has no other temporary differences. In its December 31, 2001, balance sheet, how should Noor report the deferred tax effect of this difference?
   a. As an asset of $75,000.
   b. As an asset of $100,000.
   c. As a liability of $75,000.
   d. As a liability of $100,000.

Other financial data for the year ended December 31, 1999:

Included in accounts receivable is $1,000,000 due from a customer and payable in quarterly installments of $125,000. The last payment is due December 30, 2001.

The balance in the deferred income tax liability account pertains to a temporary difference not related to a balance sheet account that arose in a prior year, of which $15,000 is expected to be paid in 2000.
Recently Disclosed Questions

49. Black Co., organized on January 2, 1997, had pretax financial statement income of $500,000 and taxable income of $800,000 for the year ended December 31, 1997. The only temporary differences are accrued product warranty costs, which Black expects to pay as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$100,000</td>
</tr>
<tr>
<td>1999</td>
<td>$ 50,000</td>
</tr>
<tr>
<td>2000</td>
<td>$ 50,000</td>
</tr>
<tr>
<td>2001</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

The enacted income tax rates are 25% for 1997, 30% for 1998 through 2000, and 35% for 2001. Black believes that future years' operations will produce profits. In its December 31, 1997, balance sheet, what amount should Black report as deferred tax asset?

a. $50,000  
b. $75,000  
c. $90,000  
d. $95,000

50. Under current generally accepted accounting principles, which approach is used to determine income tax expense?

a. Asset and liability approach.  
b. A with and without approach.  
c. Net of tax approach.  
d. Periodic expense approach.

51. Which of the following should be disclosed in a company’s financial statements related to deferred taxes?

I. The types of existing temporary differences.  
II. The types and amounts of existing permanent differences.  
III. The nature and amount of each type of operating loss and tax credit carry forward.

a. I and II only.  
b. I and III only.  
c. II and III only.  
d. I, II, and III.

52. Lion Co.'s income statement for its first year of operations shows pretax income of $6,000,000. In addition, the following differences existed between Lion's tax return and records:

<table>
<thead>
<tr>
<th>Description</th>
<th>Tax Return</th>
<th>Accounting Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncollectible accounts expense</td>
<td>$220,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>860,000</td>
<td>570,000</td>
</tr>
<tr>
<td>Tax-exempt interest revenue</td>
<td>---</td>
<td>50,000</td>
</tr>
</tbody>
</table>

Lion's current year tax rate is 30% and the enacted rate for future years is 40%. What amount should Lion report as deferred tax expense in its income statement for the year?

a. $148,000  
b. $124,000  
c. $104,000  
d. $78,000

IFRS - DEFERRED TAXES

53. Under IFRS, what tax rates are used to calculate the amount of deferred taxes?

a. Future enacted tax rates  
b. Future enacted or substantially enacted tax rates  
c. Current tax rates  
d. Current and future enacted tax rates

54. How does IFRS classify deferred tax accounts?

a. All noncurrent accounts  
b. All deferred tax assets  
c. All deferred tax liabilities  
d. Both current and noncurrent accounts.

55. Meisterburger Corporation prepares its financial statements in accordance with IFRS. Meisterburger has businesses in two taxing jurisdictions, Spain and Germany. Assume that Germany allows the offset of tax receivables against tax payables. Spain does not allow this. Meisterburger has the following deferred tax accounts at the end of Year 6. How should the deferred taxes be presented on the consolidated statement of financial position at the end of Year 6.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Amount</th>
<th>Taxing Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred Tax Asset</td>
<td>$10,000</td>
<td>Germany</td>
</tr>
<tr>
<td>Deferred Tax Liability</td>
<td>$8,000</td>
<td>Germany</td>
</tr>
<tr>
<td>Deferred Tax Asset</td>
<td>$7,000</td>
<td>Spain</td>
</tr>
<tr>
<td>Deferred Tax Liability</td>
<td>$11,000</td>
<td>Spain</td>
</tr>
</tbody>
</table>

a. Deferred Tax Asset of $17,000 and a Deferred Tax Liability of $19,000  
b. Deferred Tax Asset of $2,000 and a Deferred Tax Liability of $4,000  
c. Deferred Tax Asset of $9,000 and a Deferred Tax Liability of $11,000  
d. Deferred Tax Liability of $2,000
Chapter Thirteen  
Accounting for Income Taxes Problems

NUMBER 1

Income tax allocation is an integral part of generally accepted accounting principles. The applications of intraperiod tax allocation (within a period) and interperiod tax allocation (among periods) are both required.

Required:

1. Explain the need for intraperiod tax allocation.

2. Accountants who favor interperiod tax allocation argue that income taxes are an expense rather than a distribution of earnings. Explain the significance of this argument. Do not explain the definitions of expense or distribution of earnings.

3. Indicate and explain whether each of the following independent situations should be treated as a temporary difference or a permanent difference.
   a. Estimated warranty costs (covering a three-year warranty) are expensed for accounting purposes at the time of sale but deducted for income tax purposes when incurred.
   b. Depreciation for accounting and income tax purposes differs because of different bases of carrying the related property. The different bases are a result of a business combination treated as a purchase for accounting purposes and as a tax-free exchange for income tax purposes.
   c. A company properly uses the equity method to account for its 30% investment in another company. The investee pays dividends that are about 10% of its annual earnings.

NOTE:  
SIMULATION PROBLEMS  
START ON PAGE 13-Sim-1
Chapter Thirteen
Solutions to Accounting for Income Taxes Questions

1. (b) The gross profit from sales for 1997 and 1998 under the accrual method totals $4,200,000 and the total under the installment method is $2,000,000. This creates a temporary difference of $2,200,000. The deferred tax liability on the December 31, 1998 balance sheet will be the temporary difference times the enacted future tax rate of 30% ($2,200,000 × 30% = $660,000 deferred tax liability).

2. (c) The deferred tax liability is the amount of the difference in gross margin $2,100,000 - $1,000,000 = $1,100,000 at the future tax rate of 25% or $275,000.

3. (c) The deferred tax liability is recognized at the rate anticipated in the period when the temporary difference reverses. Therefore, the deferred tax liability is $12,000 × 25% or $3,000.

4. (c) In 2000, the company would increase its deferred tax liability by $3,900 [30% × (20,000 − 12,000)]. The current tax liability would be for only the amount due to be paid in 2000, taxable income of $80,000 × 30% = $24,000.

5. (c) The key point is that the current portion of tax expense is equal to the total tax liability for the year. $650,000 × 30% = $195,000

6. (a) Pretax (book) income $800,000
Nontaxable gain (350,000)
Depreciation difference ($ 50,000)
Taxable income $400,000
Tax rate 30%
Current taxes due $120,000
Estimated tax payments ($ 70,000)
Current tax liability $ 50,000

7. (a) Taxable Income for Federal tax purposes:
Income per books before tax $600,000
Less the following permanent & temporary differences
Income - municipal bonds (60,000)
Excess depreciation (120,000)
Proceeds life insurance (100,000)
Taxable income - Fed. Tax $320,000

Since the federal tax rate is 30%, the federal tax liability at December 31, 1998 would be $96,000 ($320,000 × 30%).

8. (a) The nondeductible book expenses are permanent differences and do not affect taxes. The temporary depreciation difference ($25,000) times the enacted future tax rate (35%) will be the deferred tax liability on the December 31, 1999 balance sheet ($25,000 × 35% = $8,750 deferred tax liability).

9. (d) The cumulative temporary difference at December 31, 2000 is $20,000. This difference will reverse as future taxable amounts after 2000. Therefore, the appropriate tax rate for the future years is 40% and the deferred tax liability should be $8,000 ($20,000 × 40%).

10. (a) The current portion of income tax expense equals the current tax payable for the year.
$129,000 × 40% current tax rate = $51,600
11. (c) $300,000 \times 30\% = $90,000.

12. (d) Difference in depreciation to be reversed in future years at future tax rates:

\[
\frac{$100,000 \times 25\% = $25,000}{+ \frac{$50,000 \times 30\% = $15,000}{} = $40,000}
\]

13. (c) The income statement for 2001 would report the following:

**Income Tax Expense**

<table>
<thead>
<tr>
<th>Current Portion</th>
<th>($200,000 \times 30%)</th>
<th>$60,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred Portion</td>
<td>($100,000 \times 30%)</td>
<td>30,000</td>
</tr>
</tbody>
</table>

Total Income Tax Expense $90,000

14. (c)

A. The journal entry to record the current taxes before the allowance entry is as follows:

<table>
<thead>
<tr>
<th>JE</th>
<th>Income Tax Expense</th>
<th>8,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deferred Tax Asset</td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td>Income Tax Payable</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>13,000</td>
</tr>
</tbody>
</table>

B. The entry to record the allowance:

<table>
<thead>
<tr>
<th>JE</th>
<th>Income Tax Expense</th>
<th>2,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Allowance to Reduce the Deferred Tax Asset to Realizable Value</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Note: Calculation is 10% $20,000 = 2,000</td>
<td></td>
</tr>
</tbody>
</table>

Total income tax expense is the total of the two JEs or $10,000.

15. (b) The annual rent of $36,000 is taxable in 1999 but only $18,000 is considered rental income for financial purposes. This creates a temporary difference of $18,000 which will be taxed at the future enacted tax rate of 40%. Therefore, the deferred tax asset at December 31, 1999 is $7,200 ($18,000 \times 40\%).

16. (b) In determining the deferred tax account that should appear on the balance sheet, the noncurrent deferred tax liability ($15,000) would be netted against the noncurrent deferred tax asset ($3,000). As a result a noncurrent deferred tax liability of $12,000 ($15,000 - 3,000) would be shown on the December 31, 2001 balance sheet.

17. (c) The excess deductible amount which reverses in 2000 is classified as current. The excess deductible amounts which reverse after 2000 are classified as noncurrent. All amounts are deferred at the reversal year rate of 25\%.

18. (d) The classification of deferred tax account depends upon the classification of the asset or liability which created the deferred tax. In this case the deferred tax liability is related to a temporary difference in depreciation created by a noncurrent asset account. Since the related asset is noncurrent, the deferred tax liability ($75,000) will also be classified as noncurrent.

19. (d) Jab Co.'s use of different depreciation methods for tax versus financial reporting purposes will result in a deferred tax account. Since the reversal next year will add to taxable income, the deferred tax account has to be a liability. The classification of the deferred tax liability is noncurrent because the related asset (equipment) that created the deferred tax is noncurrent.

20. (c) Temporary differences may arise when expenses are deducted on the tax return after they are recognized on the books (warranty costs) or before they are recognized on the books (depreciation).
21. (d) The deferred income tax expense or benefit is the sum of the net changes in the deferred tax assets and deferred tax liabilities.

22. (c) The liability method is used for recognizing temporary tax differences. It is not used for permanent differences since there is no timing difference. Intraperiod allocation does not refer to timing or temporary differences but only to how the income tax expense is spread throughout the income statement.

23. (b) The increases in deferred tax liabilities would take place in those instances where the company’s provision for income taxes is greater than its current tax payable. This cash basis taxpayer would generate a tax deduction but not an expense with the payment of an insurance premium in advance. The company would recognize rent income but not for tax purposes with an increase in rent receivable. This event would also lead to an increase in the tax provision but not in the current tax payable. An increase in the warranty obligation generates a non-deductible expense causing a tax provision which is less than the related current liability. Such an event would generate a deferred tax asset.

24. (c) The criterion used in ASC 740 is “more likely than not”. The other criteria, probable, reasonably possible and remote are part of ASC 450, Accounting for Contingencies, which does not apply to tax positions.

25. (a) The cumulative probability is as follows:

<table>
<thead>
<tr>
<th>Possible Outcome</th>
<th>Individual Probability</th>
<th>Cumulative Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,000</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>$1,600</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>$1,200</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>$1,000</td>
<td>40%</td>
<td>80%</td>
</tr>
<tr>
<td>$ 800</td>
<td>20%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The answer is $1,000 because that is the first amount whose cumulative probability exceeds 50%.

26. (b) Increase in investment:

- Investee earnings: $225,000
- Investee dividends: $75,000
- Excess: $150,000
- Ownership percentage: 40%
- Pre-tax increase in equity: $60,000
- Tax rate (future): 30%
- Increase in deferred tax liability: $18,000

27. (a) The temporary difference between book income ($180,000) and the taxable dividends ($30,000) is $150,000. Since all the undistributed earnings will be distributed as dividends in the future, the temporary difference ($150,000) needs to be reduced by the 80% dividend exclusion to determine the taxable amount. The taxable amount would be $30,000 ($150,000 – 80% × $150,000). Therefore, the deferred tax liability will be the taxable portion of the temporary difference ($30,000) times the future enacted tax rate (30%) for a total of $9,000.

28. (c) In this question, it is helpful to look at the tax journal entries for both 2000 and 2001:

**2000**

- JE Tax Receivable: ($300,000 × 30%) = 90,000
- Deferred Tax Asset: ($400,000 × 30%) = 120,000

**2001**

- Tax Benefits of Loss Carryforward & Loss Carryback: 210,000
ASC 740 requires the recognition of both the Tax Loss Carryback ($90,000) and the Loss Carryforward ($120,000) in the year of the loss (2000).

2000 JE  Tax Benefit of Loss Carryforward  120,000
           Allowance to Reduce Deferred
           Tax Asset to Realizable Value  120,000

ASC 740 also requires that an allowance against the deferred tax asset be established if it is more likely than not that none of the asset will be realized. In this case, the company is young and in 2000 does not have a pattern of earnings and the conservative approach would be to record the allowance.

2000 JE  Income Tax Expense  ($1,200,000 × 30%) 360,000
           Deferred Tax Asset  120,000
           Income Tax Payable  ($1,200,000 - $400,000 × 30%) 240,000

Since the IRS does not allow the recognition of the loss carryforward in 2000, the loss carryforward is used to reduce the taxable income for 2001.

2001 JE  Allowance to Reduce Deferred Tax Asset
to Realizable Value  120,000
           Tax Benefit of Loss Carryforward  120,000

Since Mobe Co. has a profit in 2001, the allowance account is not needed and the tax benefits of the loss carryforward is recognized for book purposes.

The total tax expense would be the $360,000 less the tax benefits of the loss carryforward ($120,000) for a net tax expense of $240,000.

29. (d) ASC 740 requires that the tax benefit of the loss carryforward be recognized in the year of the loss and a deferred tax asset account be created. This may be adjusted by an allowance if it is more likely than not that the full tax benefit of the loss carryforward may not be realized. This problem does not mention an allowance. Therefore, Bishop should set up a deferred tax asset account and recognize a tax benefit of the loss carryforward of $80,000 in 1997 ($200,000 × 40%) and a $60,000 tax benefit in 1998 ($150,000 × 40%). Since the full benefit of the loss carryforwards was recognized in 1997 and 1998, the loss carryforwards do not affect the calculation of the tax expense for 1999. The tax expense for 1999 to be shown on the income statement is $120,000 ($300,000 × 40%).

Note: The IRS does not allow for early recognition of loss carryforwards, so for tax purposes $300,000 of the loss carryforwards would be recognized in 1999 and used to offset the 1999 pretax income of $300,000 in calculating the tax liability. The tax liability would then be zero.

The journal entry for 1999:

Income tax expense  $120,000
Deferred tax asset  $120,000

30. (b) ASC 740 requires that the tax benefit of loss carryforwards be recognized in the year of the loss. In this case the tax benefit of the loss carryforward is $60,000 ($150,000 × 40%). The tax benefit of the loss carryback is $180,000 ($450,000 × 40%). Therefore, the combined benefit of the carryback and carryforward is $240,000 ($60,000 + $180,000).

31. (d) Intraperiod tax allocation should be applied to apportion income tax expense in amounts attributable to income before extraordinary items, and prior period adjustments.
32. (c) The income tax effects of extraordinary gains and losses must be included in extraordinary items in an income statement. Answers (a), (b) and (d) relate to inter-period allocation.

33. (b) The purpose of intraperiod tax allocation is to isolate the tax effect of a particular component of income. The calculation entails comparing the total tax obligation with that which would have existed had it not been for the component, the tax effect of which is being measured.

34. (d) Only item (d) requires intraperiod allocation of income tax. Item (a) results in a permanent difference and items (b) and (c) result in temporary differences.

35. (c) Income tax expense should be reported in two components: the amount currently payable (current portion) and the deferred portion. In this case, the current portion is the taxable income ($1,000) times the current tax rate of 30% for a total price of $300.

36. (d) The deferred portion of the income tax expense is calculated by considering the two temporary differences. The $800 depreciation difference will reverse in 2001 when the tax rate is 25%. This will create a deferred tax liability of $200 ($800 × 25%). The warranty cost will reverse partly in 2000 ($100) when the tax rate is 30% and partly ($300) in 2001 when the tax rate is 25%. This will create a deferred tax asset in 1999 of $105 ($100 × 30% + $300 × 25%). The deferred tax rate liability will increase tax expense by $200 and the deferred tax asset will decrease tax expense by $105 for a net increase in deferred tax expense of $95.

Note: The balance sheet will show a current deferred tax asset of $30 and a noncurrent deferred tax liability of $125 ($200 – $75).

37. (b) The receivable is classified as a current asset and the deferred tax liability which arises from the temporary difference (depreciation) is reported as a noncurrent liability due to the nature of the related asset.

38. (b) Pretax income $100,000
Excess book depreciation + 8,000
Excess taxable investee income:
   Financial income $35,000
   Taxable amount
   $25,000 × .2 = – 5,000
   – 30,000
   Current taxable amount $78,000
   Tax rate 30%
   Current tax provision $23,400

39. (a) The municipal bond interest is a permanent difference and does not generate deferred income taxes. The depreciation difference of $150,000 generates deferred tax liability as follows:
   2000 reversal—$50,000 × 30% = $15,000
   2001 and 2002 reversal—$100,000 × 25% = 25,000
   $40,000

40. (a) The current provision for income tax expense is the taxable income ($150,000) times the current tax rate (30%) for a total provision of $45,000. Since the municipal interest income and the keyperson life insurance expense are permanent differences, the tax expense and the tax liability for the year are both $45,000. Only temporary differences cause differences in taxes.

41. (b) The tax benefit of loss carryback would be $40,000 ($100,000 × 40%) and would result in a tax refund in 1998. The other $100,000 of the loss would be carried forward to offset a portion of the 1999 income. The tax liability would be the 1999 pretax income of $400,000 less the loss carryforward of $100,000 times the 40% tax rate for a total liability of $120,000.
42. (b) 1997 undistributed earnings $600,000
Ownership percentage 30%
Bart Inc.’s deferred income $180,000
Portion taxable in future 20%
Taxable amount $ 36,000
Tax rate to be applied 25%
Deferred tax liability $ 9,000

43. (b) Since the related asset is not a current asset, the deferred tax liability will be classified as noncurrent at the end of year 1 as well as at the end of year 8.

44. (a) ASC 740 requires classification based upon the related asset or liability or if no asset or liability is related, classification is based on the expected date of reversal.

Since the current portion of the warranty liability and the installment receivables are the same, the current deferred tax asset would be offset by the current deferred tax liability.

45. (d) Current assets:
Cash $ 675,000
Accounts receivable 2,695,000
Inventory 2,185,000
5,555,000
Less noncurrent portion of installment note (500,000)
Total current assets $5,055,000

46. (a) Current liabilities:
Accounts payable and accruals $1,801,000
Income tax payable (see below) 179,000
$1,980,000
Plus current portion of deferred tax liability 15,000
Total current liabilities $1,995,000

Income tax payable:
Revenues $13,360,000
Expenses 11,180,000
Pre-tax income $ 2,180,000
Tax rate 30%
Tax provision $ 654,000
Prepayments 475,000
Tax payable $ 179,000

47. (c) Retained earnings 1/1/99 $3,350,000
1999 income ($2,180,000 – $654,000) 1,526,000
Retained earnings 12/31/99 $4,876,000

48. (d) The key point is that the liability will reverse after 2001 when the tax rate is 40%. Therefore, the deferred tax liability that should appear on the December 31, 2001 balance sheet is $100,000 ($250,000 × 40%).
49. (d) Deferred taxes are calculated using future enacted tax rates.

<table>
<thead>
<tr>
<th>Year</th>
<th>Temporary Differences</th>
<th>x Enacted Tax Rates</th>
<th>= Deferred Tax Asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$100,000</td>
<td>x 30%</td>
<td>$30,000</td>
</tr>
<tr>
<td>1999</td>
<td>$ 50,000</td>
<td>x 30%</td>
<td>15,000</td>
</tr>
<tr>
<td>2000</td>
<td>$ 50,000</td>
<td>x 30%</td>
<td>15,000</td>
</tr>
<tr>
<td>2001</td>
<td>$100,000</td>
<td>x 35%</td>
<td>35,000</td>
</tr>
</tbody>
</table>

Total Deferred Tax Asset $95,000

50. (a) ASC 740 requires a balance sheet emphasis in the calculation of taxes. A balance sheet approach would stress the asset and liability calculation. For example, the calculation of a deferred tax liability uses the enacted future tax rate whereas an income statement approach would use the current year’s tax rate.

51. (b) Number I and III relate to temporary amounts that create either deferred tax assets or deferred tax liabilities and all items that create temporary differences should be disclosed. Permanent differences do not create temporary differences or deferred tax accounts and would not be disclosed as deferred taxes.

52. (c) The deferred tax expense is the change in the deferred tax asset and liability accounts for the current year. These changes are caused by the temporary differences in uncollectible tax expense of $30,000 ($250,000 vs. $220,000) and depreciation expense of $290,000 ($860,000 vs. $570,000). The change in uncollectible accounts expense of $30,000 times the future enacted tax rate of 40% creates a deferred tax asset of $12,000. The change in depreciation of $290,000 times the future enacted tax rate of 40% equals a $116,000 deferred tax liability. The journal entry would be as follows:

<table>
<thead>
<tr>
<th>JE</th>
<th>Tax Expense</th>
<th>Deferred</th>
<th>Deferred Tax Asset 104,000</th>
<th>12,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deferred Tax Liability</td>
<td>116,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

53. (b) IFRS uses future enacted or substantially enacted tax rates to calculate the amount of deferred taxes.

54. (a) IFRS classifies all deferred tax accounts as non-current.

55. (c) Germany allows netting of deferred taxes. Therefore, Germany would have a net asset of $2,000 ($10,000 - $8,000). Spain does not allow netting. The consolidated deferred tax assets would be the $2,000 from Germany and the $7,000 from Spain for a total of $9,000. The deferred tax liability would be Spain's $11,000.
Chapter Thirteen
Solutions to Accounting for Income Taxes Problems

NUMBER 1

1. Intraperiod tax allocation is necessary to obtain an appropriate relationship between income tax expense and each element of earnings (continuing operations, discontinued operations, extraordinary items, and cumulative effects of accounting changes) or between income tax expense and prior-period adjustments. Income tax expense attributable to earnings before extraordinary items is computed based solely on the earnings before extraordinary items to prevent distortion of the results of continuing operations. The extraordinary items are shown net of the corresponding income tax consequences. Any prior-period adjustment is shown net of the corresponding income tax consequences as an adjustment to beginning retained earnings.

2. Some accountants cite the argument that income taxes are an expense rather than a distribution of earnings. They apply the matching concept of accrual accounting, thus relating the income taxes presented on the earnings statement to the earnings that gave rise to those taxes. Their argument is that income tax expense for financial reporting should be related to the respective pretax accounting earnings. Implicit in this argument is the notion that a distribution of earnings is not allocated to periods.

3. a. Temporary difference. The full estimated three years of warranty expenses reduce the current year's pretax accounting earnings, but will reduce taxable income in varying amounts each respective year, as incurred. Assuming the estimate as to each warranty is valid, the total amounts deducted for accounting for tax purposes will be equal over the three-year period for a given warranty. This is an example of an expense that, in the first period, reduces pretax accounting earnings more than taxable income and, in later years, reverses and reduces taxable income without affecting pretax accounting earnings.

b. Permanent difference. This difference in depreciation for pretax accounting earnings and taxable income will never reverse because the depreciation is based on different recorded amounts of the assets in question. The income tax expense per books would be reflected based on the amount actually paid (or due) in this situation.

c. Temporary difference. The investor's share of earnings of an investee (other than subsidiaries and corporate joint ventures) accounted for by the equity method is included in pretax accounting earnings, while only dividends received are included in taxable income. This difference between pretax accounting earnings and taxable income is assumed to be related either to probable future dividend distributions or to anticipated realization on disposal of the investment and is a factor in determining income tax expense. Future dividends imply ordinary income, and future disposal of an investment implies capital-gains income. Because dividend income is subject to an 80% dividends-received deduction, the effective rate would, in this case, be lower for the ordinary dividend income than for capital gains.
NUMBER 1

Number 1 consists of 3 parts. Parts A and B consist of 4 items. Select the best answer for each item.

Required:

Part a.

Items 1 through 4 describe circumstances resulting in differences between financial statement income and taxable income. For each numbered item, determine whether the difference is:

List
- A. A temporary difference resulting in a deferred tax asset.
- B. A temporary difference resulting in a deferred tax liability.
- C. A permanent difference.

An answer may be selected once, more than once, or not at all.

1. For plant assets, the depreciation expense deducted for tax purposes is in excess of the depreciation expense used for financial reporting purposes.
2. A landlord collects some rents in advance. Rents received are taxable in the period in which they are received.
3. Interest is received on an investment in tax-exempt municipal obligations.
4. Costs of guarantees and warranties are estimated and accrued for financial reporting purposes.

Part b.

The following partially completed worksheet contain Lane Co.’s reconciliation between financial statement income and taxable income for the 3 years ended April 30, 1997, and additional information.

Lane Co.
INCOME TAX WORKSHEET
For the Three Years Ended April 30, 1997

<table>
<thead>
<tr>
<th></th>
<th>April 30, 1995</th>
<th>April 30, 1996</th>
<th>April 30, 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretax financial income</td>
<td>$900,000</td>
<td>$1,000,000</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Permanent differences</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Temporary differences</td>
<td>200,000</td>
<td>100,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Taxable income</td>
<td>$600,000</td>
<td>$800,000</td>
<td>$950,000</td>
</tr>
<tr>
<td>Cumulative temporary differences (future taxable amounts)</td>
<td>$200,000</td>
<td>$ (6)</td>
<td>$450,000</td>
</tr>
<tr>
<td>Tax rate</td>
<td>20%</td>
<td>25%</td>
<td>30%</td>
</tr>
<tr>
<td>Deferred tax liability</td>
<td>$40,000</td>
<td>$75,000</td>
<td>$ (8)</td>
</tr>
<tr>
<td>Deferred tax expense</td>
<td>$ --</td>
<td>$ (7)</td>
<td>$ --</td>
</tr>
<tr>
<td>Current tax expense</td>
<td>$ (5)</td>
<td>$ --</td>
<td>$ --</td>
</tr>
</tbody>
</table>

The tax rate changes were enacted at the beginning of each tax year and were not known to Lane at the end of the prior year.
Required:

**Items 5 through 8** represent amounts omitted from the worksheet. For each item, determine the amount omitted from the worksheet. Select the amount from the following list. An answer may be used once, more than once, or not at all.

7. Deferred tax expense for the year ended April 30, 1996.

<table>
<thead>
<tr>
<th>Amount</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>$25,000</td>
</tr>
<tr>
<td>B.</td>
<td>$35,000</td>
</tr>
<tr>
<td>C.</td>
<td>$45,000</td>
</tr>
<tr>
<td>D.</td>
<td>$75,000</td>
</tr>
<tr>
<td>E.</td>
<td>$100,000</td>
</tr>
<tr>
<td>F.</td>
<td>$112,500</td>
</tr>
<tr>
<td>G.</td>
<td>$120,000</td>
</tr>
<tr>
<td>H.</td>
<td>$135,000</td>
</tr>
<tr>
<td>I.</td>
<td>$140,000</td>
</tr>
<tr>
<td>J.</td>
<td>$160,000</td>
</tr>
<tr>
<td>K.</td>
<td>$180,000</td>
</tr>
<tr>
<td>L.</td>
<td>$200,000</td>
</tr>
<tr>
<td>M.</td>
<td>$300,000</td>
</tr>
<tr>
<td>N.</td>
<td>$400,000</td>
</tr>
</tbody>
</table>

**Part c.**

Chris Green, CPA, is auditing Rayne Co.’s 2000 financial statements. The controller, Dunn, has provided Green with the following information:

For the year ended December 31, 2000, Rayne has adopted Statement of ASC 740, *Accounting for Income Taxes*. Dunn has prepared a schedule of all differences between financial statement and income tax return income. Dunn believes that as a result of pending legislation, the enacted tax rate at December 31, 2000, will be increased for 2001. Dunn is uncertain which differences to include and which rates to apply in computing deferred taxes under ASC 740. Dunn has requested an overview of ASC 740 from Green.

**Required:**

Prepare a brief memo to Dunn from Green:
- identifying the objectives of accounting for income taxes,
- defining temporary differences,
- explaining how to measure deferred tax assets and liabilities, and
- explaining how to measure deferred income tax expense or benefit.
**NUMBER 2**

**Situation:**

Stanhope, Inc., a C corporation, is a distributor of personal electronics and has reported a net income for each year since inception. Its taxable income has consistently resulted in an effective tax rate of 33%. (Ignore state income taxes.)

You have been assigned to compute the company’s deferred portion of federal income taxes for inclusion in its financial statements for year 2 and to provide the company’s controller with a schedule that supports your computation. Your schedule should identify deductible and taxable temporary differences and components of the deferred tax computations.

The controller has provided you with the following reconciliation of Stanhope’s pretax accounting income to taxable income for year 2 and the additional information shown below. Use this information to answer the subsequent questions.

<table>
<thead>
<tr>
<th>Stanhope, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconciliation of Pretax Accounting Income to Taxable Income</td>
</tr>
<tr>
<td>Year Ended December 31, Year 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pretax accounting income</th>
<th>$678,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenses recorded on books this year and not deductible for tax purposes:</td>
<td></td>
</tr>
<tr>
<td>Meals and entertainment expenses</td>
<td>12,000</td>
</tr>
<tr>
<td>Bad debts expense provision</td>
<td>15,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>705,000</strong></td>
</tr>
<tr>
<td>Income recorded on books this year not subject to tax:</td>
<td></td>
</tr>
<tr>
<td>Tax-exempt interest income</td>
<td>15,000</td>
</tr>
<tr>
<td>Unrealized gain (loss) on trading securities</td>
<td>8,000</td>
</tr>
<tr>
<td>Deductions on tax return not charged against book income this year:</td>
<td></td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>63,000</td>
</tr>
<tr>
<td>Bad debts written off and charged against allowance account</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>Taxable income</strong></td>
<td><strong>$614,000</strong></td>
</tr>
</tbody>
</table>

1. The Allowance for Doubtful Accounts (bad debts) as of December 31, year 1, was $11,000. During year 2, uncollectible accounts totaling $5,000 were written off and charged against the allowance account. A provision for bad debts of $15,000 was charged to operations at the end of the year to result in an Allowance for Doubtful Accounts balance at December 31, year 2, of $21,000.

2. At the end of the year, there were net unrealized gains on trading securities of $8,000. There were no unrealized gains/losses on trading securities at the beginning of the year.

3. The company uses straight-line depreciation for financial reporting (GAAP) purposes and accelerated methods for income tax purposes. Balances and activity in the accumulated depreciation account for GAAP and income tax purposes are summarized below:

<table>
<thead>
<tr>
<th>GAAP</th>
<th>Tax</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated depreciation, December 31, year 1</td>
<td>1,314,000</td>
<td>2,018,000</td>
</tr>
<tr>
<td>Year 2 depreciation expense</td>
<td>196,000</td>
<td>259,000</td>
</tr>
<tr>
<td>Accumulated depreciation, December 31, year 2</td>
<td>1,510,000</td>
<td>2,277,000</td>
</tr>
</tbody>
</table>
Accounting for Deferred Taxes

Use the information contained in the Situation to prepare the deferred tax computations and supporting components by completing the following worksheet.

- In column A, select a line item that will result in a temporary difference.
- In column B, enter the total temporary difference that would result in a deferred tax asset or liability.
- Enter the total deferred tax asset or liability in the appropriate column, C or D, based on the temporary difference you recorded in column B.

Round all answers to the nearest whole dollar.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Description of temporary differences</td>
<td>Temporary differences</td>
<td>Deferred tax assets</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Totals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Selection list for description of temporary differences

<table>
<thead>
<tr>
<th>Description of temporary differences</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated depreciation, excess of tax over GAAP</td>
<td>Unrealized gain (loss) on trading securities</td>
</tr>
<tr>
<td>Accumulated depreciation, excess of GAAP over tax</td>
<td>Meals and entertainment expenses</td>
</tr>
<tr>
<td>Allowance for doubtful accounts</td>
<td>Tax-exempt interest income</td>
</tr>
<tr>
<td>Bad debts expense provision</td>
<td>Bad debts written off</td>
</tr>
</tbody>
</table>

Balance Sheet – Deferred Taxes

Use the information from your completed worksheet for deferred income taxes to prepare the applicable line items for Stanhope, Inc.’s balance sheet as of December 31, year 2. If there is no balance in a particular account, enter a value of zero (0).
Chapter 13 Simulation Solution

NUMBER 1

Part a:

1. (b) In situations in which tax depreciation exceeds financial (book) depreciation, the taxable income will be less than the financial income and will create a temporary difference resulting in a deferred tax liability. Since the depreciation is related to a long-term plant or equipment asset, the deferred tax liability will always be classified as a non-current liability.

The journal entry is:

\[
\begin{align*}
\text{Deferred Tax Expense} & \quad XX \\
\text{Deferred Tax Liability} & \quad XX
\end{align*}
\]

2. (a) Rent collected in advance will be taxable as rent revenue in the year received, but will be recognized for financial purposes when earned in a later period. Therefore, taxable income in the current year will exceed financial income and a deferred tax asset will be created. The classification of the deferred tax asset will depend upon the classification of the related liability for unearned rent.

The journal entry is:

\[
\begin{align*}
\text{Deferred Tax Asset} & \quad XX \\
\text{Deferred Tax Expense} & \quad XX
\end{align*}
\]

3. (c) Municipal interest would be included as interest revenues for financial reporting but since it is tax exempt, the interest would be excluded for calculating taxable income. This would create a permanent difference. A permanent difference causes a difference in financial net income vs. net income reported for taxes but will not cause a difference in the provision for taxes.

4. (a) Estimated guarantees and warranties are accrued as expenses for financial reporting but are not tax deductible expenses until paid (cash basis.) This temporary difference causes financial income to be lower than taxable income which creates a deferred tax asset. Since the liability for accrued guarantees and warranties is normally part current and part long-term, the related deferred tax asset will be part current and part non-current.

Part b:

5. (g) Current tax expense is $120,000. The current tax expense is the taxable income, $600,000, times the current tax rate of 20% for a total of $120,000.

6. (m) $300,000

The cumulative temporary differences at April 30, 1996 will be the $300,000 (the temporary differences for 1995 of $200,000 plus the $100,000 temporary differences for 1996.) Since the temporary differences are deducted from pretax financial income to arrive at taxable income, the differences represent increases in the cumulative total temporary differences. (See Question #7)

7. (b) $35,000

The solution approach is to prepare the following schedule:
SCHEDULE TO CALCULATE THE APRIL 30, 1996 DEFERRED TAX LIABILITY
BASED ON THE 1996 TAX RATE OF 25%

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CHANGE</th>
<th>TAX TEMPORARY DIFFERENCE</th>
<th>X</th>
<th>TAX RATE</th>
<th>=</th>
<th>BALANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>INCREASE</td>
<td>$200,000</td>
<td>X 20%</td>
<td>25%</td>
<td></td>
<td>$40,000</td>
</tr>
<tr>
<td>1996</td>
<td>INCREASE</td>
<td>$100,000</td>
<td>(PLUG JE)</td>
<td>$35,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>CUMULATIVE TOTAL</td>
<td>$300,000</td>
<td>X 25%</td>
<td>25%</td>
<td></td>
<td>$75,000</td>
</tr>
</tbody>
</table>

The 1996 JE:

Tax Expense 200,000
Deferred Tax Expense 35,000

* Taxable income $800,000 x 25% = $200,000

8. (h) $135,000

The balance in deferred tax liability at April 30, 1997 is the cumulative temporary differences of $450,000 times the 1997 tax of 30% for an ending balance of $135,000.

Part c:

To: Dunn
From: Green
Re: Accounting for income taxes

Below is a brief overview of accounting for income taxes in accordance with ASC 740.

The objectives of accounting for income taxes are to recognize (a) the amount of taxes payable or refundable for the current year, and (b) deferred tax liabilities and assets for the estimated future tax consequences of temporary differences and carryforwards. Temporary differences are differences between the tax basis of assets or liabilities and their reported amounts in the financial statements that will result in taxable or deductible amounts in future years.

Deferred tax assets and liabilities are measured based on the provisions of enacted tax law; the effects of future changes in the tax laws or rates are not anticipated. The measurement of deferred tax assets is reduced, if necessary, by a valuation allowance to reflect the net asset amount that is more likely than not to be realized. Deferred income tax expense or benefit is measured as the change during the year in an enterprise’s deferred tax liabilities and assets.
Stanhope, Inc.
Reconciliation of Pretax Accounting Income to Taxable Income
Year Ended December 31, Year 2

<table>
<thead>
<tr>
<th>Description of temporary differences</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Temporary</td>
<td>Deferred</td>
</tr>
<tr>
<td></td>
<td></td>
<td>differences</td>
<td>tax assets</td>
</tr>
<tr>
<td>2 Allowance for doubtful accounts</td>
<td>21,000</td>
<td>6,930</td>
<td></td>
</tr>
<tr>
<td>3 Accumulated depreciation, excess of tax over GAAP</td>
<td>767,000</td>
<td>253,110</td>
<td></td>
</tr>
<tr>
<td>4 Unrealized gain (loss) on trading securities</td>
<td>8,000</td>
<td>2,640</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Totals</td>
<td></td>
<td>6,930</td>
<td>255,750</td>
</tr>
</tbody>
</table>

1. The cumulative balance in the allowance account creates a temporary difference of $21,000 multiplied by the tax rate of 33% equals a current deferred tax asset of $6,930. The account is current because the item that caused the temporary difference (the allowance) is current. The account is a deferred asset because the bad debt expense on the books is higher than the bad debts deducted for IRS, which means that the IBT for books is lower than the IBT for IRS. So, if the tax expense is lower than the tax liability, the balancing part of the journal entry is a debit to the deferred asset account.

2. The excess tax depreciation results in a cumulative temporary difference of $767,000 multiplied by the tax rate of 33% equals a long-term deferred tax liability of $253,110. The account is long-term because the plant and equipment that caused the temporary difference is long-term and is a liability because the higher depreciation for taxes causes the tax payable to be lower than tax expense and the balancing part of the journal entry would be a credit to the deferred tax liability account.

3. The unrealized gain on trading securities created a temporary difference of $8,000 multiplied by the tax rate of 33% resulting in a current deferred tax liability of $2,640. The account is current because the trading securities are current and is a liability because the gain causes the tax expense to exceed the tax payable and the balancing part of the JE is a liability. A simpler approach is to note that the temporary difference is caused by an asset which automatically creates a deferred tax liability. If the temporary difference is caused by an increase in a liability, a deferred tax asset is created.

**Balance Sheet – Deferred Taxes**

<table>
<thead>
<tr>
<th>Assets:</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred taxes, current asset</td>
<td>4,290</td>
</tr>
<tr>
<td>Deferred taxes, noncurrent asset</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred taxes, current liability</td>
<td>-</td>
</tr>
<tr>
<td>Deferred taxes, noncurrent liability</td>
<td>253,110</td>
</tr>
</tbody>
</table>
The allowance for doubtful accounts is a contra current asset, so the deferred tax asset of $6,930 is a current deferred tax asset. The trading securities by definition are current assets so the deferred tax liability of $2,640 is classified as a current liability. In the balance sheet presentation of deferred tax accounts, the current deferred tax asset of $6,930 is netted against the current deferred tax liability of $2,640 and a net current deferred tax asset of $4,290 is reported.
Chapter Fourteen
Accounting for Leases, Pension and Postretirement Plans: Accounting Codification Standards

Leases and Pensions are covered under ASC 840 and 715 respectively.

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Lessee Lease Categories
Lessor Lease Categories
Computing the Present Value of Minimum Lease Payments
Computation of the Rate Implicit in the Lease
Initial Direct Costs
Costs To Be Included As Initial Direct Costs, ASC 840
Recording Capital Leases by Lessee
Recording Sales-Type Leases by Lessor
Recording Direct Financing Leases by Lessor
Recording Leveraged Leases
Disclosures -- Lessor
Disclosures -- Lessee
Real Estate Leases
Related Party Leases
Sale-Leaseback Transactions, ASC 840
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Chapter Fourteen
Accounting for Leases, Pension and Postretirement Plans: Accounting Standard Codification

ACCOUNTING FOR LEASES—ASC 840

In General
A lease is in form a rental of property, but may be in substance the acquisition of an asset and the related obligation. This has financial accounting and reporting implications for both the lessor and the lessee.

The lessee should, if certain criteria are met, treat the lease as a capital lease and record an asset and related obligation equal to the present value of the minimum lease payments. If the criteria are not met, the lease should be treated as an operating lease (lease payments are charged to expense when payable on a straight-line basis).

The lessor should treat the lease as a sales-type lease if a profit or loss is involved and certain criteria are met. Sales-type leases are usually confined to manufacturers and dealer lessors, but not necessarily. If the lease is not a sales-type lease, but the incidence of ownership has been relinquished by the lessor due to the terms of the lease (in effect, a capital lease for the lessee), the lease should be classified as a direct financing lease.

Leases that meet the criteria of leveraged leases are not to be treated as direct financing leases. Operating leases are those which do not qualify for treatment in the other categories, and lease rentals received are credited to income.

Classification of Leases
Lessees can classify leases as:
1. Capital leases, or
2. Operating leases

Lessors can classify leases as either:
1. Sales-type leases
2. Direct financing leases
3. Leveraged leases
4. Operating leases

Lessee Lease Categories
Capital Leases. The lessee will record an asset and an obligation equal to the present value of the minimum lease payments during the lease term, not to exceed fair value, if at least one of the following criteria are met:
   a. The lease transfers ownership of the property at the end of the lease term.
   b. The lease contains a bargain purchase option.
   c. The lease term is 75% or more of the economic life of the property.
   d. The present value of the minimum lease payments (excluding reimbursements for other costs) is 90% or more of the fair value of the leased property.

In general, minimum lease payments are those required to be made in connection with the lease, except that executory costs such as insurance, maintenance and taxes should be excluded. Charge executory costs to lease expense. Minimum lease payments are increased by: any guarantee of the residual value at the expiration of the lease term; any payment required because of failure to renew or extend the lease. Minimum lease payments are increased by escalator provisions in the lease agreement or commitment, where property is being constructed or acquired for later use.
If the lease meets criterion (a) or (b), the asset should be amortized consistent with the lessee's normal depreciation policy for owned assets. If not, and the lease falls under either criterion (c) or (d) as a capital lease, normal depreciation policies should be followed except that the period of amortization should be the lease term. The lease should be amortized to its expected value, if any, at the end of the lease term.

**Operating Leases.** Rent is charged to expense over the lease term on a straight-line basis. If prepayments are made under the lease terms, such prepayments will be classified as assets and amortized over the life of the lease. Assume a 10-year lease providing for a $10,000 advance payment on 1/1/97 and $4,000 annual payments:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/97</td>
<td>Leasehold</td>
<td>$10,000</td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>$10,000</td>
</tr>
<tr>
<td>12/31/97</td>
<td>Rent Expense</td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td>Leasehold</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>4,000</td>
</tr>
</tbody>
</table>

**Lessor Lease Categories**

**Sales-Type Leases.** Leases which give rise to a profit or loss at the inception of the lease; i.e., the fair value of the leased property is greater or less than the lessor cost or carrying value, if different, and:

a. The lease meets the capital lease criteria for lessees, and

b. Both of the following conditions are met:
   1. Collectibility of the lease payments is reasonably predictable, and
   2. There are no important uncertainties that exist as to unreimbursable costs yet to be incurred by the lessor.

However, a lease of real estate which otherwise would be classified as a sales type lease shall be classified as an operating lease by the lessor unless at the beginning of the lease term such lease also complies with ASC 840 relative to sales of real estate. This provision relates to the adequacy of the buyer's initial and continuing investment in the property acquired and the conditions relating to the seller's continued involvement with the property sold.

**Direct Financing Leases.** Leases that meet all the above criteria of sales-type leases except that no manufacturer or dealer profit or loss is involved, and the lease is not a leveraged lease. Otherwise, the lease should be classified as an operating lease. In direct financing leases, the cost of the leased property and the fair value are the same at the inception of the lease. ASC 840 defines "Inception of the Lease" as the date of the lease agreement or commitment, if earlier. A commitment shall be in writing and specifically set forth the principal provisions of the transaction. A preliminary agreement does not qualify.

A renewal or extension of an existing sales-type or direct financing lease which otherwise qualifies as a sales-type lease shall be classified as a direct financing lease unless the renewal or extension occurs within the last few months of the existing lease in which case it shall be classified as a sales-type lease.

**Operating Leases.** Rent is reported as income as it becomes receivable over the lease term on a straight-line basis. Initial direct costs should be deferred and allocated over the lease term in proportion to the recognition of rental income, but may be expensed as incurred if the effect is not material. The leased property should be included with or near property, plant and equipment in the balance sheet.

**Computing the Present Value of Minimum Lease Payments**

Lessee—The present value of the minimum lease payments should be computed using the lessee's incremental borrowing rate (the rate the lessee would pay if the asset were purchased with borrowed funds). Exception: See Lessor below.

Lessor—The rate implicit in the lease must be used. If the lessee knows the lessor's implicit rate and it is less than the lessee borrowing rate, the lessee should also use the implicit rate.
Computation of the Rate Implicit in the Lease

The implicit rate is the interest rate necessary to make the present value of the minimum lease payments plus the unguaranteed residual value of the leased property equal to the fair value of the leased property less any investment tax credit retained by the lessor.

Example: A crane is leased for $750 per month for 84 months. The lessee receives the investment credit of 10%. The leased property reverts to the lessor at the end of the lease. The cost of the property to the lessor is $40,000.

Computation of implicit rate by the lessor:

- Fair Value of Lessor's Property (Normal Selling Price) $42,490
- Minimum Lease Payments (84 × $750) 63,000
- Present Value of an Annuity of $1 at 1% per period,
  - 84 periods (months) (56.6484 × $750) 42,490

Note: The 1% per month rate is shown in this example without details as to its computation. The computation is complex, particularly when the present value of the residual value is involved, and CPA exam candidates would not have the means to compute the rate, but may be required to solve a problem with the rate given.

Question: Referring to the previous example, assume the lessee's borrowing rate is 13% and the lessee knows the lessor's implicit rate. What rate will the lessee use in determining the amount to be capitalized?

Answer: 12%, because the rate implicit in the lease is less than the lessee's incremental borrowing rate.

Question: Capitalize the lease for the lessee assuming the lessee's incremental borrowing rate is 12%.

Answer: Lease payments (84 × $750) = $63,000

- Present value of $63,000
  - (84 periods at 1% per period, 750 × 56.6484) = 42,490
  - Interest expense over the lease term $20,510

Initial Direct Costs

1. Sales-type lease—charge to income in the period in which the sale is recorded.
2. Direct financing lease—part of the gross investment in the lease along with the minimum lease payments and the unguaranteed residual value.

Costs To Be Included As Initial Direct Costs, ASC 840

Costs incurred by lessor to originate a lease and costs directly associated with lessor activities related to the lease. Such activities include evaluating lessee's financial condition or collateral, negotiations and processing activities. Employment costs are included insofar as they relate directly to the initiation of the lease.

Recording Capital Leases by Lessee (See Appendix A)

Journal entries, assuming the date of lease is 1/1/97 and the property has a 7-year useful life and no salvage value. Facts are as previously given.

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/97</td>
<td>Leased property under capital lease 1</td>
<td>$42,490</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obligations under capital leases 2</td>
<td></td>
<td>$42,490</td>
</tr>
<tr>
<td></td>
<td>To record capital lease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/31/97</td>
<td>Interest expense 1% × 42,490</td>
<td>425</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obligations under capital leases</td>
<td>325</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td></td>
<td>750</td>
</tr>
<tr>
<td></td>
<td>To record first payment under capital lease</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depreciation expense</td>
<td>506</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A/D leased property under capital leases</td>
<td></td>
<td>506</td>
</tr>
<tr>
<td></td>
<td>To record 1 month's depreciation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1Classified on B/S separately under Property, Plant and Equipment. May not exceed FV.
Recording Sales-Type Leases by Lessor (See Appendix A)

Assume the same facts as above, and the lessee classified the lease as a capital lease, collection of the lease payments is reasonably predictable, and there are no important uncertainties as to reimbursable costs. The lease is properly classified as a sales-type lease. The leased property reverts to the lessor at the termination of the lease.

1. Gross investment in the lease:
   Minimum lease payments \( 84 \times 750 \) $63,000\(^1\)

\(^1\)The gross investment in the lease would be increased by the unguaranteed residual value reverting to the lessor.

2. Normal selling price (fair value) $42,490

3. Rate implicit in the lease
   It is the rate at which the present value of the gross investment is equal to the fair value (less any investment credit if retained by the lessor) or the rate at which $42,490 is the present value of $63,000. That rate is 1% per month.

Note: The computation of the rate would probably be done by computer. CPA candidates in the past have not been required to make such computations.

   Application of the rate to the gross investment is:
   P.V. of 84 monthly $750 payments:  
   $750 \times 56.6484 \text{ (P.V. of annuity of $1 at 1\% compounded monthly)} $42,490

4. Computation of unearned income
   "Unearned income" is the difference between the gross investment and the present value of the components of the gross investment.

   Gross investment $ 63,000  
P.V. of minimum lease rentals (42,490)  
Unearned income $ 20,510

Journal entries recording the lease, assuming that in addition to the above, initial direct costs are $500. Note that this transaction results in a gross profit in the year of sale of $2,490.

   Minimum lease receivables $63,000  
Cost of sales 40,000  
   Sales $42,490  
   Property or Inventory 40,000  
   Unearned income 20,510

Journal entries recording initial direct cost:
   Selling expense (initial direct cost) 500  
   Cash 500

When the first monthly payment is received:
   Cash 750  
   Unearned income 1425  
   Minimum lease receivables 750  
   Lease income 1425

\(11\% \times 42,490 = 425\)

Note: This lease would be recorded by the lessee as a capital lease.
Recording Direct Financing Leases by Lessor

Assume the same facts as shown for a sales-type lease above, except that the cost of the leased property is the same as the lessor's fair value ($42,490) at the inception of the lease and that no investment credit is available. Note: Frequently the lessee may acquire the property and be reimbursed by the lessor.

Journal entries recording the lease:

Minimum lease payments receivable (gross investment) $63,000
  Property $42,490
  Unearned income 20,510
  Initial direct cost (gross investment) * 500
  Cash 500

When the first annual payment is received:
  Cash 750
  Unearned income 1425
  Minimum lease payments receivable 750
  Lease income 1425

11% × $42,490 = 425 *adjustment of interest rate due to the initial direct cost omitted

Note: This lease would be recorded by the lessee as a capital lease.

Recording Leveraged Leases

The lessor's investment is recorded net of nonrecourse debt.

DR Rentals Receivable (total rent receivable less principal and interest on nonrecourse debt)
DR Investment Tax Credit Receivable
DR Estimated Residual Value
  CR Unearned Deferred Income (investment credit plus pretax income)
  CR Cash (investment outlay)

Note to students: We have not included examples of leverage lease computations because of their specialized nature and complexity. We do not expect the computations to be CPA exam material.

Comprehensive Example:

Dumont Corporation, a lessor of office machines, purchased a new machine for $500,000 on December 31, 1999, which was delivered the same day (by prior arrangement) to Finley Company, the lessee. The following information relating to the lease transaction is available:

- The leased asset has an estimated useful life of seven years which coincides with the lease term.
- At the end of the lease term, the machine will revert to Dumont, at which time it is expected to have a residual value of $60,000 (none of which is guaranteed by Finley).
- Dumont's implicit interest rate (on its net investment) is 12%, which is known by Finley.
- Finley's incremental borrowing rate is 14% at December 31, 1999.
- Lease rentals consist of seven equal annual payments, the first of which was paid on December 31, 1999.
- The lease is appropriately accounted for as a direct financing lease by Dumont and as a capital lease by Finley.

Both lessor and lessee are calendar-year corporations and depreciate all fixed assets on the straight-line basis.

Information on present value factors is as follows:

Present value of $1 for seven periods at 12% 0.452
Present value of $1 for seven periods at 14% 0.400
Present value of an annuity of $1 in advance for seven periods at 12% 5.111
Present value of an annuity of $1 in advance for seven periods at 14% 4.889
Required:
1. Compute the annual rental.
2. Compute the amount to be recorded by the lessee for the leased asset and lease obligation as well as Finley's expenses for the year ended December 31, 2000.

Solution:
1. 

**Dumont Corporation**

**COMPUTATION OF ANNUAL RENTAL UNDER DIRECT FINANCING LEASE**

*Dated December 31, 1999*

Cost of leased machine $500,000  
Deduct present value of estimated residual value  
$60,000 \times 0.452 \text{ (present value of $1 at 12\% for 7 periods)} = 27,120  
Net investment to be recovered 472,880  
Present value of an annuity of $1 in advance for 7 periods at 12% \(\div 5.111\) Annual rental $92,522

2. 

**Finley Company**

**LEASED ASSET AND OBLIGATION, 12/31/99**

*Expenses Year Ended December 31, 2000*

Asset and initial liability under capital lease—$92,522 \times 5.111  
(present value of an annuity of $1 in advance for 7 periods at 12%\*) $472,880  
Deduct lease payment on December 31, 1999 92,522  
Balance December 31, 1999 (after initial payment) 380,358  
Interest rate \(\times 12\%\) Interest expense year ended December 31, 2000 $45,643  
Depreciation ($472,880 \div 7$) 67,554  
Total expense on lease $113,197

\* Finley Company must use Dumont Corporation's (Lessor's) implicit rate of 12\% (which is known to it), since it is lower than Finley's incremental borrowing rate of 14%.

3. 

**Dumont Corporation**

**COMPUTATION OF GROSS LEASE RENTALS RECEIVABLE AND UNEARNED INTEREST REVENUE AT INCEPTION OF DIRECT FINANCING LEASE**

*Dated December 31, 1999*

Gross lease rentals receivable ($92,522 \times 7$) $647,654  
Deduct recovery of net investment in machine on capital lease  
Cost of machine $500,000  
Residual value of machine (60,000) 440,000  
Unearned interest revenue $207,654
Disclosures—Lessor
When leasing is a significant part of the lessor's business activities, the following information should be disclosed in the financial statements or footnotes along with a general description of the lessor's leasing activities.

For Sales-Type and Direct Financing Leases
1. The components of the net investment as of the date of each balance sheet presented:
   a. Future minimum lease payments to be received, less executory costs and the accumulated allowance for uncollectible minimum lease payments receivable.
   b. The unguaranteed residual values estimated to be recovered.
   c. Unearned income.
   d. For direct financing leases, initial direct costs.
2. Future minimum lease payments to be received for each of the five succeeding fiscal years.
3. Total contingent rentals included in income for each period presented.

For Operating Leases
1. The cost and carrying amount by major classes of property and the amount of accumulated depreciation in total.
2. Minimum future rentals in total and for each of the next five years.
3. Total contingent rentals in income for each period presented.

Disclosures—Lessee
For capital leases:
1. The gross amount of assets recorded under capital leases as of the date of each balance sheet presented by major classes according to nature or function. This information may be combined with the comparable information for owned assets.
2. Future minimum lease payments as of the date of the latest balance sheet presented, in the aggregate and for each of the five succeeding fiscal years, with separate deductions from the total for the amount representing executory costs, including any profit thereon, included in the minimum lease payments and for the amount of the imputed interest necessary to reduce the net minimum lease payments to present value.
3. The total of minimum sublease rentals to be received in the future under noncancelable subleases as of the date of the latest balance sheet presented.
4. Total contingent rentals actually incurred for each period for which an income statement is presented.

For operating leases having initial or remaining noncancelable lease terms in excess of one year:
1. Future minimum rental payments required as of the date of the latest balance sheet presented, in the aggregate and for each of the five succeeding fiscal years.
2. The total of minimum rentals to be received in the future under noncancelable subleases as of the date of the latest balance sheet presented.

For all operating leases, rental expense for each period for which an income statement is presented, with separate amounts for minimum rentals, contingent rentals, and sublease rentals. Rental payments under leases with terms of a month or less that were not renewed need not be included.

A general description of the lessee's leasing arrangements including, but not limited to, the following:
1. The basis on which contingent rental payments are determined.
2. The existence and terms of renewal or purchase options and escalation clauses.
3. Restrictions imposed by lease agreements, such as those concerning dividends, additional debt, and further leasing.

Real Estate Leases
Special provisions apply to the following categories of real estate leases:
1. Land only
2. Land and buildings
3. Equipment and real estate, and
4. Part of a building

If the lease is in category 3, the minimum lease payments should be estimated by whatever means are appropriate and the equipment should be considered separately according to its classification by both lessors and lessees.
**Related Party Leases**
Classification is the same as other leases except where the terms of the lease have been significantly affected by the relationship. In such cases, the economic substance of the transaction should be recognized in classifying the lease instead of its legal form. The nature and extent of leasing transactions with related parties should be disclosed.

In consolidated statements or statements accounted for on the equity basis, profit or loss on lease transactions should be treated according to generally accepted accounting principles for such statements.

Subsidiaries whose principal business activity is leasing property or facilities to the parent or other affiliates should be consolidated. The equity method is not adequate for fair presentation.

**Sale-Leaseback Transactions**
A sale-leaseback transaction is essentially a financing arrangement whereby the property is sold and leased back to the seller.

The sale and the leaseback cannot be accounted for as independent transactions. Any gain or loss on the sale should be deferred and amortized as follows:

a. If the transactions meet the criteria for treatment as a capital lease, over the useful life of the asset, or
b. Over the period of time the asset is expected to be used if classified as an operating lease.

If the fair value of the property at the time of the transaction is less than its *undepreciated cost*, a loss should be recognized for the difference immediately.

If the seller retains use of a minor part (if the present value of the rentals is 10% or less of the fair value of the asset sold) of the property, **ASC 840** requires the sale and lease to be accounted for based on their separate terms (unless the rentals called for are unreasonable relative to current market conditions in which case an appropriate amount would be deferred or accrued by adjusting the profit or loss on the sale).

If the seller retains more than a minor part but less than substantially all of the use of the property and the profit on the sale exceeds the present value of the minimum lease payments, the excess would be recognized as profit at the date of the sale.

**Criteria for Sale-Leaseback Accounting ASC 840**
Sale-leaseback accounting shall be used by a seller-lessee only if a sale-leaseback transaction includes all of the following:

a. A normal leaseback as described below.
b. Payment terms and provisions that adequately demonstrate the buyer-lessee's initial and continuing investment in the property.
c. Payment terms and provisions that transfer all of the other risks and rewards of ownership as demonstrated by the absence of any other continuing involvement by the seller-lessee.

A normal leaseback is a lessee-lessee relationship that involves the active use of the property by the seller-lessee in consideration of payment of rent, and excludes other continuing involvement provisions or conditions.

A sale-leaseback transaction that does not qualify for sale-leaseback accounting because of any form of continuing involvement by the seller-lessee other than a normal leaseback shall be accounted for by the deposit method or as a financing. Continuing involvement includes provisions where:

a. The seller-lessee has an obligation or an option to repurchase the property or the buyer-lessee can compel the seller-lessee to repurchase the property.
b. The seller-lessee guarantees the buyer-lessee's investment or a return on that investment for a limited or extended period of time.
The financial statements of a seller-lessee shall include a description of the terms of the sale-leaseback transaction, including future commitments, obligations, provisions, or circumstances that require or result in the seller-lessee's continuing involvement.

The financial statements of a seller-lessee that has accounted for a sale-leaseback transaction by the deposit method or as a financing according to the provisions of this Statement also shall disclose:

a. The obligation for future minimum lease payments as of the date of the latest balance sheet presented in the aggregate and for each of the five succeeding fiscal years.
b. The total of minimum sublease rentals, if any, to be received in the future under noncancelable subleases in the aggregate and for each of the five succeeding fiscal years.

Example: On January 1, 2000, Marsh Company sold an airplane with an estimated useful life of ten years. At the same time, Marsh leased back the airplane as follows in the three separate situations:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales price (fair value)</td>
<td>$500,000</td>
<td>$500,000</td>
<td>$500,000</td>
</tr>
<tr>
<td>Book value</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Lease period</td>
<td>1 year</td>
<td>3 years</td>
<td>9 years</td>
</tr>
<tr>
<td>Annual rental</td>
<td>$50,000</td>
<td>$60,000</td>
<td>$74,000</td>
</tr>
<tr>
<td>Present value of lease rentals in advance at 10%</td>
<td>$50,000</td>
<td>$164,000</td>
<td>$469,000</td>
</tr>
<tr>
<td>Criterion met—Use of</td>
<td>minor part</td>
<td>more than minor part, less than substantially all</td>
<td>substantially all</td>
</tr>
</tbody>
</table>

Journal entries (ignoring income taxes):

a) 1/1/00

Cash 500,000
Aircraft (net) 100,000
Gain 400,000

Since a minor part of the use of the asset is being leased back, the entire gain is recognized.

Rent expense 50,000
Cash 50,000

Rent expense is recorded for an operating lease.

b) 1/1/00

Cash 500,000
Aircraft (net) 100,000
Gain 236,000
Deferred gain 164,000

Since more than a minor part but less than substantially all of the asset's use is being leased back, gain is recognized to the extent of the excess of the gain over the present value of the lease payments.

Rent expense 5,333
Deferred gain 54,667
Cash 60,000

Rent expense and amortization of the deferred gain under an operating lease is recorded. The amortization is for the 2000 year.
c) 1/1/00

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>500,000</td>
</tr>
<tr>
<td>Aircraft (net)</td>
<td>100,000</td>
</tr>
<tr>
<td>Gain</td>
<td>- 0 -</td>
</tr>
<tr>
<td>Deferred gain</td>
<td>400,000</td>
</tr>
<tr>
<td>Leased aircraft</td>
<td>469,000</td>
</tr>
<tr>
<td>Lease liability</td>
<td>469,000</td>
</tr>
<tr>
<td>Lease liability</td>
<td>74,000</td>
</tr>
<tr>
<td>Cash</td>
<td>74,000</td>
</tr>
</tbody>
</table>

The entire gain is deferred and a capitalized lease is recorded.

12/31/00

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest expense</td>
<td>39,500</td>
</tr>
<tr>
<td>Liability</td>
<td>39,500</td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>7,667</td>
</tr>
<tr>
<td>Deferred gain</td>
<td>44,444</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>52,111</td>
</tr>
</tbody>
</table>

\[
\begin{align*}
469,000 \div 9 &= 52,111 \\
400,000 \div 9 &= 44,444 \\
\text{Difference} &= 7,667
\end{align*}
\]

Interest and depreciation is recorded on a capitalized lease.
APPENDIX A

LEASES

LESSEE’S POINT OF VIEW

CAPITALIZABLE LEASE

CRITERIA: MEET ONE
A. Transfer title
B. Bargain purchase option
C. 75% or more of asset’s useful life
D. Present Value of Future Lease Payments is 90%
or more of the asset’s fair market value

THEORY: “Substance over Form”
“Purchase an Asset on Installments”

ACCOUNTING

<table>
<thead>
<tr>
<th>Annuity Due</th>
<th>Ordinary Annuity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annuity in Advance</td>
<td>Annuity in Arrears</td>
</tr>
</tbody>
</table>

20X2
Jan. 1 Leased Asset XXX Jan. 1 Leased Asset XXX
Lease Liability XXX
Jan. 1 Lease Liability XXX
Cash XXX
Jan. 1 Interest Expense XXX
Acc. Dep. - Lease Asset XXX
Dec. 31 Interest Expense XXX
Interest Payable XXX
Jan. 1 Interest Payable XXX
Lease Liability XXX
Cash XXX

20X3
Jan. 1 Interest Payable XXX Jan. 1 No Entry
Lease Liability XXX
Cash XXX

CALCULATION OF PRESENT VALUE
OF FUTURE LEASE PAYMENTS

USE LOWER OF TWO INTEREST RATES

A. Present Value of Lease Payments XXX
(Exclude Executory Cost)

PLUS EITHER
B. PV of BARGAIN PURCHASE OPTION XXX

OR
PV of GUARANTEED RESIDUAL XXX

TOTAL PRESENT VALUE XXX
APPENDIX B

LEASES

LESSOR'S POINT OF VIEW

CAPITALIZABLE LEASE

CRITERIA: MEET ONE
A. Transfer title
B. Bargain purchase option
C. 75% or more of asset’s useful life
D. Present Value of Future Lease Payments is 90% or more of the asset’s fair market value

PLUS

CRITERIA: MEET BOTH
A. No problem with collectibility of lease receivable
B. No important uncertainties surround the amount of unreimbursable cost yet to be incurred by the lessor under the lease

THEORY: “SUBSTANCE OVER FORM”

TYPES OF LEASES

DIRECT FINANCING

SALES TYPE

Lessor = “Bank”
Lessor = “Bank and Manufacturer or Dealer”

Interest Revenue
Interest Revenue & Gross Profit

ACCOUNTING

JE Lease Receivable XXX
Unearned Interest XXX
Inventory of Leased Assets XXX
JE Cost of Goods Sold
Inventory XXX

JE Cash
Lease Receivable XXX
JE Unearned Interest
Interest Revenue XXX
LEASES: IFRS

In the US, a lease is defined as an operating or a capital lease for the lessee. For the lessor the lease is defined as an operating, a direct financing or sales-type lease. Under IFRS, the lease is defined as either an operating or a finance lease for both the lessee and lessor.

Under IFRS, a finance lease is one in which substantially all of the risks or benefits of ownership have been transferred to the lessee. IFRS uses eight criteria as a basis for determining whether the lease is a finance lease. The first four are essentially the same as US GAAP without the "bright lines" which is what critics call the 75% and 90% rules under US GAAP. IFRS adds an additional four criteria. Only one criterion must be met to be considered a finance lease. The criteria are listed below:

1. The lease transfers ownership to the lessee at the end of the lease term,
2. The lessee has a bargain purchase option that is reasonably certain to be exercised,
3. The lease term is for the "major part" of the economic life of the asset,
4. The present value of the minimum lease payments "amounts to at least substantially all of the fair value of the leased asset,"
5. The leased assets are of a specialized nature such that only the lessee can use them,
6. If the lease is cancelable by the lessee, the lessor's costs associated with the cancellation are borne by the lessee,
7. Gains or losses associated with fluctuations in the leased asset FMV are borne by the lessee, and
8. The lessee can continue to lease the asset for a secondary period for a substantially lower rent than market rent.

Another significant difference occurs when land and buildings are leased together. Under IFRS if the title to the land does not transfer, the land is usually classified as an operating lease and if the building meets one of the criteria it is recorded as a finance lease.

**Fast Track Summary**

<table>
<thead>
<tr>
<th></th>
<th>IFRS</th>
<th>US GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of criteria to determine a capital lease (US) or a finance lease (IFRS)</td>
<td>Eight</td>
<td>Four</td>
</tr>
<tr>
<td>&quot;Bright Lines&quot;</td>
<td>No</td>
<td>75% rule and 90% rule</td>
</tr>
<tr>
<td>Lease land and building together</td>
<td>Land is operating lease</td>
<td>No separation of land and building</td>
</tr>
<tr>
<td>Title to land does not transfer</td>
<td>Building is a finance lease</td>
<td></td>
</tr>
</tbody>
</table>

14-13
PENSIONS

Types of Pension Plans

- **Defined benefit pension plan**
  A pension plan that defines an amount of pension benefit to be provided, usually as a function of one or more factors such as age, years of service, or compensation. Any pension plan that is not a defined contribution pension plan is, for purposes of this Statement, a defined benefit pension plan.

- **Defined contribution pension plan**
  A plan that provides pension benefits in return for services rendered, provides an individual account for each participant, and specifies how contributions to the individual’s account are to be determined instead of specifying the amount of benefits the individual is to receive. Under a defined contribution pension plan, the benefits a participant will receive depend solely on the amount contributed to the participant’s account, the returns earned on investments of those contributions, and forfeitures of other participants’ benefits that may be allocated to each participant’s account.

EMPLOYER’S ACCOUNTING FOR PENSIONS-ASC 715

In general these pronouncements apply to the measurement, recognition and disclosure requirements for defined benefit pension plan.

In reviewing for Pensions, the candidate should focus on the following key points:

1. Terminology (see pension terms)
2. Differences between a defined contribution plan and a defined benefit plan.
3. Calculation of pension expense (5 elements).
4. Journal entry to record a pension expense and employer funding.
5. Prior service costs and unrealized gains and losses
   a. Reporting of the change in and amortization of prior service cost as a part of the comprehensive income
   b. Reporting of the change in and amortization of unrealized gains and losses as a part of other comprehensive income.
6. Calculation of actual return on plan assets and the balance in the projected benefit obligation (see worksheet).
7. Pension plan disclosures. (ASC 715)
Listed below is a visual representation of these points:

**ACCOUNTING FOR PENSIONS**

I. **Traditional Income Statement**  
(Five points)

   **Pension Expense**
   
a. Service cost XX  
b. Interest on project benefit obligation XX  
c. Actual and expected return on plan assets XX  
d. Amortization of unrecognized prior service cost XX  
e. Amortization of unrecognized gains or loss XX  

Total – Pension Expense XX

II. **Other Comprehensive Income**

   a. Change in an amortization of prior service cost  
b. Change in and amortization of unrealized gains and losses

I. **Balance Sheet**

   A. **Asset or Liability**  
      
      Recognize the funded status of the plan as either an asset or liability. The funded status is calculated by comparing the end of period balances of the projected benefit obligation to the fair value of plan assets.

   B. **Accumulated other comprehensive income**  
      
      (Stockholder’s Equity Account)

      1. Balance of unrecognized prior service cost

      2. Balance of unrecognized gains and losses
Our initial focus will be on the calculation of the five elements of pension expenses (net periodic pension cost).

1. Service cost—The present value of benefits earned by employees during the period according to the pension benefit formula contained within the pension plan.

2. Interest cost—The increase in the projected benefit obligation due to the passage of time. Such interest costs are to be measured based upon rates at which the pension benefits could be effectively settled (PBGC annuity rates and high quality fixed income rates).

3. Actual return on plan assets—Based upon the fair value of plan assets at the beginning and end of the period, adjusted for contributions and benefit payments. Although the actual return is disclosed as a component of pension cost, pension expense will include an amount equal to the expected return in plan assets. The difference between expected return and the actual return is included in the gain or loss component (#5) below.

4. Amortization of unrecognized prior service cost—The cost of retroactive benefits is amortized by assigning an equal amount to each future period of service of each employee who is active at the date of the initiation of the plan (or amendment.) If essentially all of the employees are inactive, such cost shall be amortized based upon the remaining life expectancy of those participants. The amortization can, alternative, be computed using a straight-line approach based upon the average remaining service life of the employees or any other rational approach which results in faster write-off than the service-life approach first discussed above (disclosure of method is required).

5. Amortization of cumulative unrecognized gains or losses using the “corridor” approach.
   - Gains and Losses consist of the following two items:
     a. Changes in the amount of the projected benefit obligation or plan assets resulting from experience which is different from what was assumed, or from changes in assumptions.
     b. The difference between the actual return on plan assets and the expected return on plan assets.
   - Amortization using the corridor approach:
     a. The corridor was arbitrarily established by the FASB as 10% of the greater of the beginning period balance in the projected benefit obligation or the market related value of the plan assets. This corridor establishes a threshold for amortization.
     b. The excess of the beginning of the period cumulative unrecognized gains or losses over the corridor amount is amortized in the same manner as the prior period costs.

For example:
XYZ Corporation adopts a defined benefit pension plan on January 1, 20X8, with no retroactive benefits to employees. The company uses a 10% rate as appropriate for settling any projected benefit obligation and the expected return on assets is also projected at 10%. Using the benefits/years of service approach, the actuary has determined a service cost of $300,000 for 20X8 and $330,000 for 20X9.

**Accounting entries assuming the amounts are funded:**

<table>
<thead>
<tr>
<th></th>
<th>20X8</th>
<th>20X9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension Expense</td>
<td>$300,000</td>
<td>$330,000</td>
</tr>
<tr>
<td>Cash</td>
<td>$300,000</td>
<td>$330,000</td>
</tr>
</tbody>
</table>

**Accounting entries assuming the company funds $275,000 in 20X8 and $300,000 in 20X9:**

<table>
<thead>
<tr>
<th></th>
<th>20X8</th>
<th>20X9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension expense</td>
<td>$300,000</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$275,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Accrued pension liability</td>
<td>25,000</td>
<td>32,500</td>
</tr>
<tr>
<td>Pension expense</td>
<td></td>
<td>$332,500*</td>
</tr>
<tr>
<td>Cash</td>
<td>$300,000</td>
<td></td>
</tr>
<tr>
<td>Accrued pension liability</td>
<td>32,500</td>
<td></td>
</tr>
</tbody>
</table>
Calculations for 20X9 JE:

Service cost $330,000
Interest on projected benefit obligation 10% x $300,000 30,000
Return on plan assets - $275,000 x 10% (27,500)
Total pension expense $332,500

Assuming the company funds $320,000 in 20X8 and $340,000 in 20X9:

<table>
<thead>
<tr>
<th></th>
<th>20X8</th>
<th>20X9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension Expense</td>
<td>$300,000</td>
<td>$328,000*</td>
</tr>
<tr>
<td>Prepaid Pension cost</td>
<td>20,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Cash</td>
<td>$320,000</td>
<td>$340,000</td>
</tr>
</tbody>
</table>

Calculations for 20X9 JE:

Service cost $330,000
Interest on projected benefit obligation 10% x $300,000 30,000
Return on plan assets - $320,000 x 10% (32,000)
Total pension expense $328,000

The calculation of pension expense becomes more complicated with the addition of the amortization of unrecognized prior service cost and unrealized gains and losses. The calculations of these amortizations are listed below:

Prior Service Cost

Prior service cost is usually an amendment to the plan in which credit is given to employees who worked with the company before the pension plan was adopted. The cost is amortized over the remaining service lives of the employees.

The amortization of prior service cost is calculated by dividing the unrecognized prior service cost at the beginning of the period by the average remaining service life of the employees affected by the prior service cost.

For example:

Magic Company amended its defined benefit pension plan granting a total credit of $120,000 to four employees for services rendered prior to the adoption of the plan. The employees, Adams, Boyd, Carr and Denton, are expected to retire from the company as follows:

- Adams will retire after three years.
- Boyd and Carr will retire after five years.
- Denton will retire after seven years.

First, calculate the remaining years of service for the four employees: Adams (3 years), Boyd (5 years), Carr (5 years) and Denton (7 years) for a total of 20 years of service remaining.

Second, divide the 20 years of service by the number of employees (4) to calculate the average service life of 5 years for the employees.

Finally, divide the unrecognized prior service cost ($120,000) by the average service life of the employees (5 years) for an amortization amount of $24,000 for the period.
Cumulative Unrecognized Gains and Losses

Unrecognized gains and losses usually consist of two items:

A. The difference between the expected return on the plan assets and the actual return on the plan assets
B. The difference between the actuarial projections for the projected benefit obligation and the actual balance in projected benefit obligations

For example:

Magic Corporation obtained the following information from its actuary. All amounts given are as of 20X8 (beginning of the year).

<table>
<thead>
<tr>
<th>1/1/20X8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected benefit obligation</td>
</tr>
<tr>
<td>Market-related asset value</td>
</tr>
<tr>
<td>Cumulative unrecognized loss</td>
</tr>
<tr>
<td>Average remaining service period</td>
</tr>
</tbody>
</table>

Calculation of cumulative unrecognized loss recognized as part of pension expense for 20X8 (step 5):

Step 1 – Calculate the corridor amount.
10% of the greater of the January 1 projected benefit obligation or market related asset value. Since the market-related asset value is larger, the corridor would be:
10% X $1,600,000 = $160,000 corridor

Step 2 – Calculate the amount to be amortized by comparing the cumulative unrecognized loss to the corridor.
$200,000 - $160,000 = $40,000 amount to be amortized.

Step 3 – Calculate the amortization amount to be included in the 20X8 pension expense by dividing the amortization amount in step 2 by the average remaining service period.
$40,000 divided by 5 years = $8,000 (the 20X8 amortization).

Comprehensive Example for calculating pension expense:

XYZ Corporation sponsors a defined benefit pension plan for its employees. On January 1, 20X8, the following balance relate to the plan:

| Projected Benefit Obligation          | $475,000 |
| Plan Assets                          | 450,000  |
| Accrued Pension Liability            | 25,000   |
As a result of the operation of the plan during 20X8, the following additional data are provided:

- Service Cost for 20X8: $85,000
- Interest/Discount/Settlement Date: 10%
- Actual return on plan assets: 52,000

On January 1, 20X8 the company amended its plan to include a charge for prior service cost to cover employee services before the pension plan was adopted: $100,000

- Amortization of prior service cost for 20X8: 19,000
- Expected return on plan assets: 47,000
- Contributions: 99,000
- Pension benefits paid: 81,000

On December 31, 20X8, the actuaries reviewed the balance in the projected benefit obligation and based on their analysis decided to increase the ending balance by $76,000.

**Required: Calculate Pension Expense**

1. Service Cost: $85,000
2. Interest on January 1 projected benefit obligation: 10% x $475,000 = 47,500
3. Actual return on plan assets: 52,000
   - Minus unexpected gain: 5,000
   - Expected return on plan assets: (47,000)
4. Amortization of prior service cost: 19,000
5. Amortization of unrealized gains or losses: -0-

Total Pension Expense: $104,500

**Notes:**

A. When the actual return differs from the expected return, the actual return is disclosed and the difference is shown as an unexpected gain (or loss). This unexpected gain becomes a part of the balance in unexpected gains or losses total which will be discussed later.

B. There is not an amortization of the unrecognized gain because the difference between the actual return and the expected return is not determined until the end of the period.

C. The benefits are paid by a trustee and are not recorded as a journal entry on the company’s books.

D. The actuarial adjustment to the projected benefit obligation does not affect the calculation of pension expense. The adjustment will be a part of the unrealized gains or losses total which will be discussed later.

This completes the details of the calculation of the pension expenses.

Now, let’s look at the details of the recording of the other pieces of the accounting for pensions. This is most easily done by using a pension worksheet.
Using this same example, the pension worksheet would appear as follows:

<table>
<thead>
<tr>
<th>Items</th>
<th>Annual Pension Expense</th>
<th>Prior Service Cost</th>
<th>Gains/Losses</th>
<th>Pension Asset/Liability</th>
<th>Projected Benefit Obligation</th>
<th>Plan Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, Dec. 31, 20X7</td>
<td>25,000 Cr.</td>
<td>475,000 Cr.</td>
<td>450,000 Dr.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Amendment prior service cost Jan 1</td>
<td></td>
<td>100,000 Dr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Service Cost</td>
<td>85,000 Dr.</td>
<td></td>
<td>85,000 Cr.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Interest Cost on Jan 1 PBO</td>
<td>47,500 Dr.</td>
<td></td>
<td></td>
<td>47,500 Cr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Actual Return Plan Assets</td>
<td>52,000 Cr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52,000 Dr.</td>
</tr>
<tr>
<td>3a. Unexpected gain</td>
<td>5,000 Dr.</td>
<td></td>
<td></td>
<td>5,000 Cr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Amortization of PSC</td>
<td>19,000 Dr.</td>
<td>19,000 Cr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Amortization of Gains or Losses</td>
<td>-0-</td>
<td>-0-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Actuarial loss</td>
<td></td>
<td>76,000 Dr.</td>
<td></td>
<td>76,000 Cr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Contributions</td>
<td>99,000 Cr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>99,000 Dr.</td>
</tr>
<tr>
<td>(d) Benefits Paid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>81,000 Dr.</td>
<td>81,000 Cr.</td>
</tr>
<tr>
<td>Journal entry for 20X8</td>
<td>104,500 Dr.</td>
<td>89,000 Cr.</td>
<td>81,000 Dr.</td>
<td>71,000 Dr.</td>
<td>157,500 Cr.</td>
<td></td>
</tr>
<tr>
<td>Accum. Other Comp Inc, Jan 1, 20X8</td>
<td>-0-</td>
<td>-0-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance, December 31, 20X8</td>
<td>81,000 Dr.*</td>
<td>71,000 Dr.*</td>
<td>182,500 Cr.</td>
<td>702,500 Cr.</td>
<td>520,000 Dr.</td>
<td></td>
</tr>
</tbody>
</table>

*Balances shown on the balance sheet in the Accumulated Other Comprehensive Income Account

Notes on Worksheet

1. Note the format of the worksheet. The center section represents calculations necessary for the journal entry and calculation of the ending balances in the ledger accounts. The far right section represents “memo records”. These are records that must be kept by the company but are not in the general ledger.

2. The amendment for prior service cost increases unrecognized prior service cost and the total pension liability (projected benefit obligation).

3. Notice that the total pension expense did not change from our previous calculation on page 14-19. SFAS #158 did not change the calculation of pension expense.

4. SFAS #158 changed the recording and presentation of prior service cost and gains and losses. Note on the worksheet that the change to prior service cost and gains and losses will be recorded as changes in other comprehensive income and shown on the other comprehensive income statement. These changes will then be closed to the balance sheet account. Accumulated other comprehensive income (See JE’s after these notes) and shown as a part of stockholder’s equity.

5. Study the changes in projected benefit obligation. Especially note that the actuarial adjustment at December 31, 20X8 caused an increase in the PBO.

6. Study the changes in the plan assets.

7. Notice that the benefits paid are not recorded by the company because they are paid by the trustee.

8. A reconciliation can be done to check the balance in the Pension Asset/Liability account. The December 31, 20X8 balance in the projected benefit obligation ($702,500) minus the balance in plan assets ($520,000) should equal the balance in the pension asset/liability account ($182,500).

Journal Entry from the worksheet to record the pension cost:

| Pension Expense | 104,500 |
| Other comprehensive income- prior service cost | 81,000 |
| Other comprehensive income – gains/losses | 71,000 |
| Cash | 99,000 |
| Pension Asset/Liability | 157,500 |
Entry to close the temporary accounts:

Revenue and Expense summary 104,500
Accumulated other comprehensive income-PS cost 81,000
Accumulated other comprehensive income-gains/losses 71,000

Pension Expense 104,500
Other comprehensive income –prior service cost 81,000
Other comprehensive income- gains/losses 71,000

Note that the other comprehensive income accounts are closed to the stockholders’ equity account, accumulated other comprehensive account.

Disclosure of the above pension information on the financial statements:

1. **Tradition Income Statement**
   
   Pension Expense $104,500

2. **Other Comprehensive Income Statement**
   
   A. Change in prior service cost $81,000 debit
   B. Change in gains/losses $71,000 debit

3. **Balance Sheet**
   
   A. Pension Liability $182,500*

   *Balance in pension asset/liability account is technically the different between the ending balance in the projected benefit obligation and the balance in plan assets.

   B. **Stockholder’s Equity**

   Accumulated other comprehensive income $152,000 debit”
   
   *Prior Service Cost $ 81,000
   Gains/Losses 71,000
   Total $152,000

This comprehensive example includes all the elements of pension accounting except the accounting for gains/losses in 20X9 and disclosures which will be covered later.

**Gains/Losses 20X9**

Remember that the adjustment on the worksheet for the actuarial loss was made on December 21, 20X8. Therefore, there could not have been an amortization of the loss in 20X8 and the $5,000 was not recognized gain until year end.

So let’s look at 20X9 balance in accumulated other comprehensive income:

Gains/Loss January 1, 20X9 Balance $71,000 debit
-20X9 amortization based on the corridor approach (8,000)
+ Excess of actual return over expected return on Plan assets 5,000 gain

Gain/Loss Balance December 31, 20X9 $68,000

The change in the balance during the year, a $3,000 decrease would be shown on the other comprehensive income statement.
Summary
Review all the pieces of the worksheet. Create a balance worksheet and re-work the whole problem without referring to your notes.

Will the FAR simulation include a worksheet problem?
Because of time constraints it may or may not. Regardless, the candidate will be expected to calculate pension expense and other comprehensive income, prepare the journal entries and calculate the ending balances in the pension asset/liability account, projected benefit obligation and plan assets. So, regardless of whether the material is covered in simulation short answers, a simulation worksheet, or a multiple choice, knowledge of all elements on the worksheet are essential.

ACCOUNTING FOR SETTLEMENTS AND CURTAILMENTS OF DEFINED BENEFIT PENSION PLANS, ASC 715
A settlement of a pension obligation is an irrevocable elimination of an employer's pension liability usually through an annuity contract or a lump sum cash payment.

A curtailment is an event which significantly reduces the expected future service of employees or eliminates the accrual of benefits for some or all employees. Curtailments generally include plan suspension or termination, plant closings or discontinuation of a business segment.

ASC 715 requires that the net gain or loss from a settlement or curtailment be included in the net income of the period. When a plan is settled, the net gain or loss is the unrecognized net gain or loss that has not been recognized as part of pension expense plus any remaining unrecognized net asset existing when FASB Statement No. 87 was initially applied. When a plan is curtailed, the portion of the unrecognized prior service cost associated with the estimated reduced future benefits is a loss. This amount is combined with any gain or loss from a change in the projected benefit obligation due to the curtailment in order to determine the net gain or loss.

Termination Benefits Paid to Employees
Such benefits may include lump-sum cash payments, payments over future periods, or similar inducements. SFAS No. 88 requires that a company record a loss and a liability for these termination benefits when the following two conditions are met:
1. The employee accepts the offer.
2. The amount can be reasonably estimated.

The amount of the loss includes the amount of any lump-sum payments and the present value of any expected future benefits.

PENSION TERMS
Actual return on plan assets component (of net periodic pension cost)
The difference between fair value of plan assets at the end of the period and the fair value at the beginning of the period, adjusted for contributions and payments of benefits during the period.

Benefit/years-of-service approach
One of three benefit approaches. Under this approach, an equal portion of the total estimated benefit is attributed to each year of service. The actuarial present value of the benefits is derived after the benefits are attributed to the periods.

Expected return on plan assets
An amount calculated as a basis for determining the extent of delayed recognition of the effects of changes in the fair value of assets. The expected return on plan assets is determined based on the expected long-term rate of return on plan assets and the market-related value of plan assets.

Flat-benefit formula (Flat-benefit plan)
A benefit formula that bases benefits on a fixed amount per year of service, such as $20 of monthly retirement income for each year of credited service. A flat-benefit plan is a plan with such a formula.
Fund
Used as a verb, to pay over to a funding agency (as to fund future pension benefits or to fund pension cost). Used as a noun, asset accumulated in the hands of a funding agency for the purpose of meeting pension benefits when they become due.

Market-related value of plan assets
A balance used to calculate the expected return on plan assets. Market-related value can be either fair market value or a calculated value that recognizes changes in fair value in a systematic and rational manner over not more than five years. Different ways of calculating market-related value may be used for different classes of assets, but the manner of determining market-related value shall be applied consistently from year to year for each asset class.

Measurement date
The date as of which plan assets and obligations are measured.

Net periodic pension cost
The amount recognized in an employer's financial statements as the cost of a pension plan for a period. Components of net periodic pension cost are service cost, interest cost, actual return on plan assets, gain or loss, amortization of unrecognized prior service cost, and amortization of the unrecognized net obligation or asset existing at the date of initial application of this Statement. This Statement uses the term net periodic pension cost instead of net pension expense because part of the cost recognized in a period may be capitalized along with other costs as part of an asset such as inventory.

Participant
Any employee or former employee, or any member or former member of a trade or other employee association, or the beneficiaries of those individuals, for whom there are pension plan benefits.

PBGC
The Pension Benefit Guaranty Corporation.

Prepaid pension cost
Cumulative employer contributions in excess of accrued net pension cost.

Prior service cost
The cost of retroactive benefits granted in a plan amendment. See also Unrecognized prior service cost.

Projected benefit obligation
The actuarial present value as of a date of all benefits attributed by the pension benefit formula to employee service rendered prior to that date. The projected benefit obligation is measured using assumptions as to future compensation levels if the pension benefit formula is based on those future compensation levels (pay-related, final-pay, final-average-pay, or career-average-pay plans).

Retroactive benefits
Benefits granted in a plan amendment (or initiation) that are attributed by the pension benefit formula to employee services rendered in periods prior to the amendment. The cost of the retroactive benefits is referred to as prior service cost.

Service cost component (of net periodic pension cost)
The actuarial present value of benefits attributed by the pension benefit formula to services rendered by employees during that period. The service cost component is a portion of the projected benefit obligation and is unaffected by the funded status of the plan.

Single-employer plan
A pension plan that is maintained by one employer. The term also may be used to describe a plan that is maintained by related parties such as a parent and its subsidiaries.

Unfunded projected benefit obligation
The excess of the projected benefit obligation over plan assets.

Unrecognized net gain or loss
The cumulative net gain or loss that has not been recognized as part of the net periodic pension cost. See Gain or loss.

Unrecognized prior service cost
That portion of prior service cost that has not been recognized as a part of net periodic pension cost.

Vested benefits
Benefits for which the employee's right to receive a present or future pension benefit is no longer contingent on remaining in the service of the employer. (Other conditions, such as inadequacy of the pension fund, may prevent the employee from receiving the vested benefit.). Under graded vesting, the initial vested right may be to receive
in the future a stated percentage of a pension based on the number of years of accumulated credited service; thereafter, the percentage may increase with the number of years of service or of age until the right to receive the entire benefit has vested.

ACCOUNTING FOR POST RETIREMENT BENEFITS – ASC 715

The Statement applies to all postretirement benefits expected to be provided by an employer to current and former employees, their beneficiaries, and dependents. Postretirement benefits include health care, life insurance, and other welfare benefits such as tuition assistance, day care, legal services, and housing subsidies provided after retirement.

A plan is an arrangement to provide current and former employees with benefits after they retire in exchange for the employees’ services over a specified period of time, upon attaining a specified age while in service, or both. Benefits may commence immediately upon termination of service or may be deferred until retired employees attain a specified age.

SFAS #106 added two new terms for postretirement benefits:

The expected postretirement benefit obligation (EPBO) for an employee is the actuarial present value as of a particular date of the postretirement benefits expected to be paid by the employer’s plan to or on behalf of the employee. Measurement of the expected postretirement benefit obligation is based on the expected amount and timing of future benefits, taking into consideration the expected future cost of providing the benefits and the extent to which those costs are shared by the employers, the employee, or others. (Similar to projected benefit obligation)

The accumulated postretirement benefit obligation (APBO) as of a particular date is the actuarial present value of all future benefits attributed to an employee’s service rendered to that date. Prior to the date on which an employee attains full eligibility for the benefits that employee is expected to earn under the terms of the postretirement benefit plan (the full eligibility date), the accumulated postretirement benefit obligation for an employee is a portion of the expected postretirement benefit obligation.

In other words, the APBO excludes the future service costs of active employees who are not yet fully eligible for the pension plan whereas the costs are included in the EPBO.

The accounting for postretirement benefits parallels that of pension accounting with two major exceptions:

A. Post retirement benefits are spread over the attribution period of the employee rather than the period of the employee’s retirement. The attribution period is the period from the time the employee begins employment until the employee is fully eligible to receive the benefits and ceases to earn additional benefits by performing service (the vesting date).

B. Postretirement benefits emphasizes the accumulated post retirement benefit obligation rather than the expected postretirement benefit obligation.

Compare the following visual for postretirement benefits with the one on page 14-14 for pensions.
ACCOUNTING FOR POSTRETIREMENT BENEFITS

I. Traditional Income Statement
(Five points)

Postretirement Benefits Expense
a. Service cost XX
b. Interest on APBO, January 1, 20X8 XX
c. Actual and expected return on plan assets XX
d. Amortization of unrecognized prior service cost XX
e. Amortization of unrecognized gains or loss XX

Total – Postretirement Benefits Expense XX

III. Other Comprehensive Income

c. Change in an amortization of prior service cost
d. Change in and amortization of unrealized gains and losses

Note the change to accumulated postretirement benefits obligations (APBO) under part B of postretirement benefits expense and under the funded status for the balance sheet asset or liability. The rest of the visual did not change.

Definitions

The definitions for the five pieces of postretirement benefits expense are very similar to the definition for pension expense:

Service Cost
The service cost component recognized in a period shall be determined as the portion of the expected postretirement benefit obligation attributed to employee service during that period. The measurement of the service cost component requires identification of the substantive plan and the use of assumptions and an attribution method.
**Interest Cost**
The interest cost component recognized in a period shall be determined as the increase in the accumulated postretirement benefit obligation to recognize the effects of the passage of time. Measuring the accumulated postretirement benefit obligation as a present value requires accrual of an interest cost at rates equal to the assumed discount rates.

For a funded plan, the actual return on plan assets shall be determined based on the fair value of plan assets at the beginning and end of the period, adjusted for contributions and benefit payments.

**Prior Service Cost**
Plan amendments or the initiation of a plan may include provisions that attribute the increase or reduction in benefits to employee service rendered in prior periods or only to employee service to be rendered in future periods. For purposes of measuring the accumulated postretirement benefit obligation, the effect of a plan amendment on a plan participant’s expected postretirement benefit obligation shall be attributed to each year of service in that plan participant’s attribution period, including years of service already rendered by that plan participant, in accordance with the attribution of the expected postretirement benefit obligation to years of service.

The cost of benefit improvement is the increase in the accumulated postretirement benefit obligation as a result of the plan amendment, measured at the date of the amendment.

The prior service cost is amortized by assigning an equal amount to each remaining year of service to the full eligibility date of each plan participant active at the date of the amendment who was not yet fully eligible for benefits at that date. If all or almost all of a plan’s participants are fully eligible for benefits the prior service cost shall be amortized based on the remaining life expectancy of those plan participants rather than on the remaining years of service to the full eligibility dates of the active plan participants.

To reduce the complexity and detail of the computations required, consistent use of an alternative amortization approach that more rapidly reduces unrecognized prior service cost is permitted. For example, a straight-line amortization of the cost over the average remaining years of service to full eligibility (attribution period) for benefits of the active plan participants is acceptable.

**Gains and Losses**
Gains and losses are changes in the amount of either the accumulated postretirement benefit obligation or plan assets resulting from experience different from that assumed or from changes in assumptions. The Statement generally does not distinguish between those sources of gains and losses.

As a minimum, amortization of an unrecognized net gain or loss (excluding plan asset gains and losses not yet reflected in market-related value) shall be included as a component of net postretirement benefit cost for a year if, as of the beginning of the year, that unrecognized net gain or loss exceeds 10 percent of the greater of the accumulated postretirement benefit obligation or the market-related value of plan assets. If amortization is required, the minimum amortization shall be that excess divided by the average remaining service period of active plan participants. If all or almost all of a plan’s participants are inactive, the average remaining life expectancy of the inactive participants shall be used instead of the average remaining service period.

Using the example on page 14-18 and 14-19 with small modifications compare differences in the pension worksheet versus the postretirement benefits worksheet.

**Example for postretirement benefits worksheet:**

XYZ Corporation sponsors a postretirement benefit plan for its employees. On January 1, 20X8, the following balance relate to the plan:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Postretirement Benefit Obligation</td>
<td>$475,000</td>
</tr>
<tr>
<td>Accumulated Postretirement Benefit Obligation</td>
<td>455,000</td>
</tr>
<tr>
<td>Plan Assets</td>
<td>450,000</td>
</tr>
<tr>
<td>Accrued Pension Liability</td>
<td>5,000</td>
</tr>
</tbody>
</table>
As a result of the operation of the plan during 20X8, the following additional data are provided:

- **Service Cost for 20X8**: $85,000
- **Interest/Discount/Settlement Rate**: 10%
- **Actual return on plan assets**: 52,000

On January 1, 20X8 the company amended its plan to include a charge for prior service cost to cover employee services before the postretirement plan was adopted. 

- **Amortization of prior service cost for 20X8**: 100,000
- **Expected return on plan assets**: 19,000
- **Contributions**: 47,000
- **Pension benefits paid**: 81,000

On December 31, 20X8, the actuaries reviewed the balance in the APBO and based on their analysis decided to increase the ending balance by 76,000

**Required: Calculate Postretirement Benefit Expense**

1. **Service Cost** $85,000
2. Interest on January 1 APBO $45,500
3. **Actual return on plan assets** (52,000)
   - Minus unexpected gain 5,000
4. Amortization of prior service cost 19,000
5. Amortization of unrealized gains or losses -0-

**Total Postretirement Expense** $101,500

---

**Comprehensive Postretirement Worksheet 20X8**

<table>
<thead>
<tr>
<th>Name</th>
<th>Postretirement Benefits Expense</th>
<th>Cash</th>
<th>Prior Service Cost</th>
<th>Gains/Losses</th>
<th>Postretirement Benefits Asset/Liability</th>
<th>Accumulated Postretirement Benefit Obligation</th>
<th>Plan Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, Dec 31, 20X8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Amendment prior service cost Jan 1</td>
<td>100,000 Dr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Service Cost</td>
<td>85,000 Cr.</td>
<td>100,000 Dr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Interest on Jan 1 APBO</td>
<td>45,500 Cr.</td>
<td>45,500 Cr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Actual Return Plan Assets</td>
<td>52,000 Cr.</td>
<td>52,000 Cr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3a. Unexpected gain</td>
<td>5,000 Dr.</td>
<td>5,000 Cr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Amortization of PSC</td>
<td>18,000 Dr.</td>
<td>18,000 Dr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Amortization of Gains or Losses</td>
<td>-0-</td>
<td>-0-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Actuarial loss</td>
<td>76,000 Dr.</td>
<td>76,000 Cr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Contributions</td>
<td>99,200 Cr.</td>
<td>99,200 Cr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Benefits Paid</td>
<td>81,000 Cr.</td>
<td>81,000 Cr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Journal entry for 20X8**

- 101,500 Dr. | 99,200 Cr. | 82,000 Dr. | 71,000 Dr. | 165,500 Cr.

**Accum. Other Comp Inc. Jan 1, 20X8**

- 82,000 Dr. | 71,000 Dr. | 165,500 Cr. | 850,500 Cr. | 520,000 Cr.

**Balance, December 31, 20X8**

- 82,000 Dr.** | 71,000 Dr.** | 165,500 Cr. | 850,500 Cr. | 520,000 Cr.

*Note again the emphasis on the accumulated postretirement benefit obligation.

**Balances shown on the balance sheet in the Accumulated Other Comprehensive Income Account**

---

1. Note that the first column in the memo record section is accumulated postretirement benefit obligation.
2. The line 2 interest is calculated based on the January 1 APBO (10% x 455,00 = 45,500)
3. The amortization of prior service cost changed because the amortization period changed from using service life until retirement for pension to using the full eligibility date (vesting date) for postretirement benefits.
**Journal Entry** from the worksheet to record the postretirement benefits expense. (The journal entry is basically the same as the JE for pensions.)

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postretirement benefits expense</td>
<td>101,500</td>
</tr>
<tr>
<td>Other comprehensive income- prior service cost</td>
<td>82,000</td>
</tr>
<tr>
<td>Other comprehensive income – gains/losses</td>
<td>71,000</td>
</tr>
<tr>
<td>Cash</td>
<td>99,000</td>
</tr>
<tr>
<td>Postretirement benefits asset/liability</td>
<td>155,500</td>
</tr>
</tbody>
</table>

**Entry to close the temporary accounts:**

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue and expense summary</td>
<td>101,500</td>
</tr>
<tr>
<td>Accumulated other comprehensive income-PS cost</td>
<td>82,000</td>
</tr>
<tr>
<td>Accumulated other comprehensive income-gains/losses</td>
<td>71,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postretirement benefits expense</td>
<td>105,500</td>
</tr>
<tr>
<td>Other comprehensive income – prior service cost</td>
<td>82,000</td>
</tr>
<tr>
<td>Other comprehensive income – gains/losses</td>
<td>71,000</td>
</tr>
</tbody>
</table>

**Amortization of Gains/Losses – Corridor Approach**

The last point relates to the corridor approach for gains/losses.

Example:
Magic Corporation obtained the following information from its actuary:

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/20X8</td>
<td></td>
</tr>
<tr>
<td>Expected postretirement benefit obligation</td>
<td>$1,800,000</td>
</tr>
<tr>
<td>Accumulated postretirement benefit obligation</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Market-related asset value</td>
<td>1,600,000</td>
</tr>
<tr>
<td>Cumulative unrecognized loss</td>
<td>200,000</td>
</tr>
</tbody>
</table>

**Calculation of cumulative unrecognized loss recognized as part of postretirement benefit expense for 20X8 (step 5):**

Step 1 – Calculate the corridor amount.
10% of the greater of the January 1 **accumulated postretirement benefit obligation** or market related asset value. Since the market-related asset value is larger, the corridor would be:

\[ 10\% \times \$1,600,000 = \$160,000 \text{ corridor} \]

Step 2 – Calculate the amount to be amortized by comparing the cumulative unrecognized loss to the corridor.

\[ \$200,000 - \$160,000 = \$40,000 \text{ amount to be amortized} \]

Step 3 – Calculate the amortization amount to be included in the 20X8 postretirement benefit expense by dividing the amortization amount in step 2 by the average remaining service period.

\[ \frac{\$40,000}{5 \text{ years}} = \$8,000 \text{ (the 20X8 amortization)} \]

*Note the use of the accumulated postretirement benefit obligation instead of the expected postretirement benefit obligation. Everything else is the same as the procedures for pensions.*
Disclosures about Pensions and Other Postretirement Benefits

ASC 715 combines the disclosures for pensions and postretirement benefits:

An employer that sponsors one or more defined benefit pension plans or one or more defined benefit postretirement plans shall provide the following information:

a. A reconciliation of beginning and ending balances of the benefit obligation showing separately, if applicable, the effects during the period attributable to each of the following: service cost, interest cost, contributions by plan participants, actuarial gains and losses, foreign currency exchange rate changes, benefits paid, plan amendments, business combinations, divestitures, curtailments, settlements, and special termination benefits.

b. A reconciliation of beginning and ending balances of the fair value of plan assets showing separately, if applicable, the effects during the period attributable to each of the following: actual return on plan assets, foreign currency exchange rates, contributions by the employers, contributions by plan participants, benefits paid, business combinations, divestitures, and settlements.

c. The funded status of the plans, the amounts not recognized in the statement of financial position, and the amounts recognized in the statement of financial position, including:

1. The amount of any unamortized prior service cost.

2. The amount of any unrecognized net gain or loss (including asset gains and losses not yet reflected in market-related value.)

3. The amount of any remaining unamortized, unrecognized net obligation or net asset existing at the initial date of application of ASC 715.

4. The net pension or other postretirement benefit prepaid assets or accrued liabilities.

5. Any intangible asset and the amount of accumulated other comprehensive income recognized.

d. The amount of net periodic benefit cost recognized, showing separately the service cost component, the interest cost component, the expected return on plan assets for the period, the amortization of the unrecognized transition obligation or transition asset, the amount of recognized gains and losses, the amount of prior service cost recognized, and the amount of gain or loss recognized due to a settlement or curtailment.

e. The amount included within other comprehensive income for the period arising from a change in the prior service cost and gains/losses.

f. On a weighted-average basis, the following assumptions used in the accounting for the plans: assumed discount rate, rate of compensation increase (for pay-related plans), and expected long-term rate of return on plan assets.

g. The assumed health care cost trend rate(s) for the next year used to measure the expected cost of benefits covered by the plan (gross eligible charges) and a general description of the direction and pattern of change in the assumed trend rates thereafter, together with the ultimate trend rate(s) and when that rate is expected to be achieved.

h. The effect of a one-percentage-point increase and the effect of a one-percentage-point decrease in the assumed health care cost trend rates on (1) the aggregate of the service and interest cost components of net periodic postretirement health care benefit cost and (2) the accumulated postretirement benefit obligation or health care benefits. (For purposes of this disclosure, all other assumptions shall be held constant, and the effects shall be measured based on the substantive plan that is basis for the accounting.)
Information about plan assets

a) The percentage of the fair value of plan assets held in each major category (e.g., equity, debt, real estate, and other assets) at the measurement date.

b) A description of investment policies and strategies, such as target allocation percentages (if any) calculated on the weighted-average basis by major asset category. This description also should include factors helpful to understanding the policies and strategies, such as objectives, risk management, allowable investments, and the relationship of assets and obligations.

c) A description of how the overall expected long-term rate-of-return assumption was determined.

d) Other asset categories and information about specific assets helpful in understanding risks and the expected long-term rate of return.

Benefits to be paid in each of the next 5 years and the total to be paid in years 6-10 based on the assumptions used to determine the benefit obligation at the current year-end. Future employee service is considered in the calculation. The best estimate of contributions in the next year (the aggregate of legal mandates, discretionary amounts, and non-cash items).

**PENSIONS: IFRS**

There are about as many similarities in the accounting for pensions as there are differences. Both IFRS and US GAAP account for defined contribution plans in a similar manner. The basic theory for the accrual of defined benefit pension cost is the same but the terminology is different. In the US, the concept is called “benefit-years-of-service approach” and under IFRS it is called “projected-unit-credit approach.” The calculation for pension expense under the defined benefit plan has the same basic components with some minor adjustments:

1. Service costs
2. Interest cost on the beginning of the period accrued benefit obligation
3. Expected return on plan assets
4. Past service cost
5. Actuarial gains and losses

There are some differences in terminology. In the US, the total pension liability is called the projected benefit obligation (PBO). In IFRS, the term is present value of the defined benefit obligation (DBO). In addition the accumulated benefit obligation is called the accrued benefit obligation. Under US GAAP the discount rate or settlement rate is used. Under IFRS the discount rate used is the market yield for high quality bonds having a similar maturity.

Under US GAAP, actuarial gains or losses are amortized over the average expected working lives of employees. Under IFRS, actuarial gains or losses may be recognized immediately or amortize over the expected remaining working lives of the employees using a corridor approach similar to US GAAP.

**Prior Service Costs**

The amount of prior service cost is calculated in the same manner for both IFRS and US GAAP. In the US, the prior service cost is amortized over the average remaining service lives of its employees. Under IFRS, any vested amount is recognized immediately and the unvested amount is spread over the average remaining vesting period.

In US GAAP, the unrecognized prior service cost and the cumulative unrecognized gains and loses are shown on the balance sheet under accumulated other comprehensive income and the amortization is shown on the other comprehensive income statement. Under IFRS there are not any balance sheet accounts associated with unrecognized past service cost or cumulative unrecognized gains or losses.
# FAST TRACK SUMMARY
## PENSIONS

<table>
<thead>
<tr>
<th></th>
<th>IFRS</th>
<th>US GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accounting for Defined</strong>&lt;br&gt;Contribution Plans</td>
<td>Same</td>
<td>Same</td>
</tr>
<tr>
<td><strong>Accounting for Defined</strong>&lt;br&gt;Benefit Plans</td>
<td>Five components</td>
<td>Five components</td>
</tr>
<tr>
<td><strong>Terminology</strong></td>
<td>“Project-unit-credit approach”</td>
<td>Benefit-years-of service approach</td>
</tr>
<tr>
<td><strong>Terminology</strong></td>
<td>Past Service Cost</td>
<td>Prior Service Cost</td>
</tr>
<tr>
<td><strong>Terminology</strong></td>
<td>Accrued Benefit Obligation</td>
<td>Accumulated Benefit Obligation</td>
</tr>
<tr>
<td><strong>Discount Rate</strong></td>
<td>Market Yield High Quality Bonds</td>
<td>Settlement Rate</td>
</tr>
<tr>
<td><strong>Actuarial Gains or Losses</strong></td>
<td>Recognize Immediately or Amortize using corridor approach</td>
<td>Not allowed or Amortize using corridor approach</td>
</tr>
<tr>
<td><strong>Calculation of total Prior (Past) Service Cost</strong></td>
<td>Same</td>
<td>Same</td>
</tr>
<tr>
<td><strong>Accounting for Prior Service</strong></td>
<td>Recognize vested amount immediately and amortize balance over average vesting period</td>
<td>Amortize total amount over remaining service lives of employees</td>
</tr>
<tr>
<td><strong>Disclosure of unrecognized Past (Prior) Service Cost</strong></td>
<td>Not on Balance Sheet</td>
<td>Balance Sheet under Accumulated other Comprehensive Income</td>
</tr>
<tr>
<td><strong>Disclosure of unrecognized Net gain or loss</strong></td>
<td>Not on Balance Sheet</td>
<td>Balance Sheet under Accumulated other Comprehensive Income</td>
</tr>
</tbody>
</table>
Chapter Fourteen
Accounting for Leases, Pensions and Postretirement Plans Questions

LEASES

LESSEE-CRITERIA
1. One criterion for a capital lease is that the term of the lease must equal a minimum percentage of the leased property's estimated economic life at the inception of the lease. What is this minimum percentage?
   a. 51%.
   b. 75%.
   c. 80%.
   d. 90%.

2. Lease M does not contain a bargain purchase option, but the lease term is equal to 90% of the estimated economic life of the leased property. Lease P does not transfer ownership of the property to the lessee at the end of the lease term, but the lease term is equal to 75% of the estimated economic life of the leased property. How should the lessee classify these leases?
   a. Capital lease Operating lease
   b. Capital lease Capital lease
   c. Operating lease Capital lease
   d. Operating lease Operating lease

LESSEE-INCEPTION TO LEASE
3. On December 30, 1995, Haber Co. leased a new machine from Gregg Corp. The following data relate to the lease transaction at the inception of the lease:

<table>
<thead>
<tr>
<th>Lease term</th>
<th>10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual rental payable at the end of each lease year</td>
<td>$100,000</td>
</tr>
<tr>
<td>Useful life of machine</td>
<td>12 years</td>
</tr>
<tr>
<td>Implicit interest rate</td>
<td>10%</td>
</tr>
<tr>
<td>Present value of an annuity of 1 in advance for 10 periods at 10%</td>
<td>6.76</td>
</tr>
<tr>
<td>Present value of annuity of 1 in arrears for 10 periods at 10%</td>
<td>6.15</td>
</tr>
<tr>
<td>Fair value of the machine</td>
<td>$700,000</td>
</tr>
</tbody>
</table>

The lease has no renewal option, and the possession of the machine reverts to Gregg when the lease terminates. At the inception of the lease, Haber should record a lease liability of
   a. $0
   b. $615,000
   c. $630,000
   d. $676,000

4. On January 2, 1996, Ashe Company entered into a ten-year noncancellable lease requiring year-end payments of $100,000. Ashe's incremental borrowing rate is 12%, while the lessor's implicit interest rate, known to Ashe, is 10%. Present value factors for an ordinary annuity for ten periods are 6.145 at 10%, and 5.650 at 12%. Ownership of the property remains with the lessor at expiration of the lease. There is no bargain purchase option. The leased property has an estimated economic life of 12 years. What amount should Ashe capitalize for this leased property on January 2, 1996?
   a. $1,000,000
   b. $614,500
   c. $565,000
   d. $0

LESSEE-EXECUTORY COST
5. Neal Corp. entered into a nine-year capital lease on a warehouse on December 31, 1999. Lease payments of $52,000, which includes real estate taxes of $2,000, are due annually, beginning on December 31, 2000, and every December 31 thereafter. Neal does not know the interest rate implicit in the lease; Neal's incremental borrowing rate is 9%. The rounded present value of an ordinary annuity for nine years at 9% is 5.6. What amount should Neal report as capitalized lease liability at December 31, 1999?
   a. $280,000.
   b. $291,200.
   c. $450,000.
   d. $468,000.
6. Robbins, Inc., leased a machine from Ready Leasing Co. The lease qualifies as a capital lease and requires 10 annual payments of $10,000 beginning immediately. The lease specifies an interest rate of 12% and a purchase option of $10,000 at the end of the tenth year, even though the machine's estimated value on that date is $20,000. Robbins' incremental borrowing rate is 14%.

The present value of an annuity due of 1 at:
- 12% for 10 years is 6.328
- 14% for 10 years is 5.946

The present value of 1 at:
- 12% for 10 years is .322
- 14% for 10 years is .270

What amount should Robbins record as lease liability at the beginning of the lease term?

a. $62,160  
b. $64,860  
c. $66,500  
d. $69,720

7. On January 1, 1997, Babson, Inc., leased two automobiles for executive use. The lease requires Babson to make five annual payments of $13,000 beginning January 1, 1997. At the end of the lease term, December 31, 2001, Babson guarantees the residual value of the automobiles will total $10,000. The lease qualifies as a capital lease. The interest rate implicit in the lease is 9%. Present value factors for the 9% rate implicit in the lease are as follows:

For an annuity due with 5 payments 4.240
For an ordinary annuity with 5 payments 3.890
Present value of $1 for 5 periods 0.650

Babson's recorded capital lease liability immediately after the first required payment should be

a. $48,620  
b. $44,070  
c. $35,620  
d. $31,070

8. On January 1, 1998, Harrow Co. as lessee signed a five-year noncancellable equipment lease with annual payments of $100,000 beginning December 31, 1998. Harrow treated this transaction as a capital lease. The five lease payments have a present value of $379,000 at January 1, 1998, based on interest of 10%. What amount should Harrow report as interest expense for the year ended December 31, 1998?

a. $37,900  
b. $27,900  
c. $24,200  
d. $0

9. On January 1, 1997, Blaugh Co. signed a long-term lease for an office building. The terms of the lease required Blaugh to pay $10,000 annually, beginning December 30, 1997, and continuing each year for 30 years. The lease qualifies as a capital lease. On January 1, 1997, the present value of the lease payments is $112,500 at the 8% interest rate implicit in the lease. In Blaugh's December 31, 1997, balance sheet, the capital lease liability should be

a. $102,500  
b. $111,500  
c. $112,500  
d. $290,000

10. On January 1, 1996, Day Corp. entered into a 10-year lease agreement with Ward, Inc. for industrial equipment. Annual lease payments of $10,000 are payable at the end of each year. Day knows that the lessor expects a 10% return on the lease. Day has a 12% incremental borrowing rate. The equipment is expected to have an estimated useful life of 10 years. In addition, a third party has guaranteed to pay Ward a residual value of $5,000 at the end of the lease.

The present value of an ordinary annuity of $1 at
- 12% for 10 years is 5.6502
- 10% for 10 years is 6.1446

The present value of $1 at
- 12% for 10 years is .3220
- 10% for 10 years is .3855

In Day's October 31, 1996, balance sheet, the principal amount of the lease obligation was

a. $63,374  
b. $61,446  
c. $58,112  
d. $56,502
LESSEE-CLASSIFICATION OF LEASE LIABILITY

11. On December 30, 1998, Rafferty Corp. leased equipment under a capital lease. Annual lease payments of $20,000 are due December 31 for 10 years. The equipment’s useful life is 10 years, and the interest rate implicit in the lease is 10%. The capital lease obligation was recorded on December 30, 1998, at $135,000, and the first lease payment was made on that date. What amount should Rafferty include in current liabilities for this capital lease in its December 31, 1998, balance sheet?

   a. $6,500
   b. $8,500
   c. $11,500
   d. $20,000

12. A lessee had a ten-year capital lease requiring equal annual payments. The reduction of the lease liability in year 2 should equal

   a. The current liability shown for the lease at the end of year 1.
   b. The current liability shown for the lease at the end of year 2.
   c. The reduction of the lease obligation in year 1.
   d. One-tenth of the original lease liability.

LESSEE-DEPRECIATION EXPENSE

13. On January 2, 1998, Cole Co. signed an eight-year noncancelable lease for a new machine, requiring $15,000 annual payments at the beginning of each year. The machine has a useful life of 12 years, with no salvage value. Title passes to Cole at the lease expiration date. Cole uses straight-line depreciation for all of its plant assets. Aggregate lease payments have a present value on January 2, 1998, of $108,000, based on an appropriate rate of interest. For 1998, Cole should record depreciation (amortization) expense for the leased machine at

   a. $0
   b. $9,000
   c. $13,500
   d. $15,000

14. On January 2, 1999, Nori Mining Co. (lessee) entered into a 5-year lease for drilling equipment. Nori accounted for the acquisition as a capital lease for $240,000, which includes a $10,000 bargain purchase option. At the end of the lease, Nori expects to exercise the bargain purchase option. Nori estimates that the equipment's fair value will be $20,000 at the end of its 8-year life. Nori regularly uses straight-line depreciation on similar equipment. For the year ended December 31, 1999, what amount should Nori recognize as depreciation expense on the leased asset?

   a. $48,000.
   b. $46,000.
   c. $30,000.
   d. $27,500.

LESSEE-DISCLOSURES

15. On July 1, 1999, South Co. entered into a ten-year operating lease for a warehouse facility. The annual minimum lease payments are $100,000. In addition to the base rent, South pays a monthly allocation of the building's operating expenses, which amounted to $20,000 for the year ended June 30, 2000. In the notes to South's June 30, 2000, financial statements, what amounts of subsequent years' lease payments should be disclosed?

   a. $100,000 per annum for each of the next five years and $500,000 in the aggregate.
   b. $120,000 per annum for each of the next five years and $600,000 in the aggregate.
   c. $100,000 per annum for each of the next five years and $900,000 in the aggregate.
   d. $120,000 per annum for each of the next five years and $1,080,000 in the aggregate.

LESSOR-SALES TYPE LEASE

16. Winn Co. manufactures equipment that is sold or leased. On December 31, 1996, Winn leased equipment to Bart for a five-year period ending December 31, 2001, at which date ownership of the leased asset will be transferred to Bart. Equal payments under the lease are $22,000 (including $2,000 executory costs) and are due on December 31 of each year. The first payment was made on December 31, 1996. Collectibility of the remaining lease payments is reasonably assured, and Winn has no material cost uncertainties. The normal sales price of the equipment is $77,000, and the cost is $60,000. For the year ended December 31, 1996, what amount of income should Winn realize from the lease transaction?

   a. $17,000
   b. $22,000
   c. $23,000
   d. $33,000
17. Howe Co. leased equipment to Kew Corp. on January 2, 1999, for an eight-year period expiring December 31, 2006. Equal payments under the lease are $600,000 and are due on January 2 of each year. The first payment was made on January 2, 1999. The list selling price of the equipment is $3,520,000 and its carrying cost on Howe's books is $2,800,000. The lease is appropriately accounted for as a sales-type lease. The present value of the lease payments at an imputed interest rate of 12% (Howe's incremental borrowing rate) is $3,300,000.

What amount of profit on the sale should Howe report for the year ended December 31, 1999?

a. $720,000.
b. $500,000.
c. $90,000.
d. $0.

18. Peg Co. leased equipment from Howe Corp. on July 1, 1995, for an eight-year period expiring June 30, 2003. Equal payments under the lease are $600,000 and are due on July 1 of each year. The first payment was made on July 1, 1995. The rate of interest contemplated by Peg and Howe is 10%. The cash selling price of the equipment is $3,520,000, and the cost of the equipment on Howe's accounting records is $2,800,000. The lease is appropriately recorded as a sales-type lease. What is the amount of profit on the sale and interest revenue that Howe should record for the year ended December 31, 1995?

<table>
<thead>
<tr>
<th>Profit on sale</th>
<th>Interest revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $720,000</td>
<td>$176,000</td>
</tr>
<tr>
<td>b. $720,000</td>
<td>$146,000</td>
</tr>
<tr>
<td>c. $45,000</td>
<td>$176,000</td>
</tr>
<tr>
<td>d. $45,000</td>
<td>$146,000</td>
</tr>
</tbody>
</table>

19. In a lease that is recorded as a sales-type lease by the lessor, interest revenue

a. Should be recognized in full as revenue at the lease's inception.
b. Should be recognized over the period of the lease using the straight-line method.
c. Should be recognized over the period of the lease using the effective interest method.
d. Does not arise.

LESSOR-DIRECT FINANCING LEASE

20. Glade Co. leases computer equipment to customers under direct-financing leases. The equipment has no residual value at the end of the lease and the leases do not contain bargain purchase options. Glade wishes to earn 8% interest on a five-year lease of equipment with a fair value of $323,400. The present value of an annuity due of $1 at 8% for five years is 4.312. What is the total amount of interest revenue that Glade will earn over the life of the lease?

a. $51,600
b. $75,000
c. $129,360
d. $139,450

OPERATING LEASES

21. On June 1, 2000, Oren Co. entered into a five-year nonrenewable lease, commencing on that date, for office space and made the following payments to Cant Properties:

<table>
<thead>
<tr>
<th>Bonus to obtain lease $30,000</th>
<th>First month's rent $10,000</th>
<th>Last month's rent $10,000</th>
</tr>
</thead>
</table>

In its income statement for the year ended June 30, 2000, what amount should Oren report as rent expense?

a. $10,000.
b. $10,500.
c. $40,000.
d. $50,000.

22. On July 1, 1996, Gee, Inc., leased a delivery truck from Marr Corp. under a 3-year operating lease. Total rent for the term of the lease will be $36,000, payable as follows:

| 12 months at $500 = $6,000 |
| 12 months at $750 = 9,000 |
| 12 months at $1,750 = 21,000 |

All payments were made when due. In Marr's June 30, 1998, balance sheet, the accrued rent receivable should be reported as

a. $0
b. $9,000
c. $12,000
d. $21,000
23. Wall Co. leased office premises to Fox, Inc. for a five-year term beginning January 2, 1999. Under the terms of the operating lease, rent for the first year is $8,000 and rent for years 2 through 5 is $12,500 per annum. However, as an inducement to enter the lease, Wall granted Fox the first six months of the lease rent-free. In its December 31, 1999, income statement, what amount should Wall report as rental income?
   a. $12,000.
   b. $11,600.
   c. $10,800.
   d. $8,000.

24. Quo Co. rented a building to Hava Fast Food. Each month Quo receives a fixed rental amount plus a variable rental amount based on Hava’s sales for that month. As sales increase so does the variable rental amount, but at a reduced rate. Which of the following curves reflects the monthly rentals under the agreement?

   a. I
   b. II
   c. III
   d. IV

**LEASEHOLD IMPROVEMENTS**

   a. $45,600
   b. $45,000
   c. $44,000
   d. $43,200

**SALE AND LEASEBACK**

**MINOR PART (PV OF LEASE RENTALS < 10% OF FMV OF ASSET SOLD)**

26. The following information pertains to a sale and leaseback of equipment by Mega Co. on December 31, 1998:

   Sales price $400,000
   Carrying amount $300,000
   Monthly lease payment $3,250
   Present value of lease payments $36,900
   Estimated remaining life 25 years
   Lease term 1 year
   Implicit rate 12%

   What amount of deferred gain on the sale should Mega report at December 31, 1998?
   a. $0
   b. $36,900
   c. $63,100
   d. $100,000

**MORE THAN A MINOR PART BUT LESS THAN SUBSTANTIALLY ALL (PV OF LEASE RENTALS > 10% BUT < 90% OF FMV OF ASSET SOLD)**

27. On December 31, 1994, Parke Corp. sold Edlow Corp. an airplane with an estimated remaining useful life of ten years. At the same time, Parke leased back the airplane for three years. Additional information is as follows:

   Sales price $600,000
   Carrying amount of airplane at date of sale $100,000
   Monthly rental under lease $6,330
   Interest rate implicit in the lease as computed by Edlow and known by Parke (this rate is lower than the lessee's incremental borrowing rate) 12%
   Present value of operating lease rentals ($6,330 for 36 months @ 12%) $190,581

   The leaseback is considered an operating lease.

   In Parke’s December 31, 1994, balance sheet, what amount should be included as deferred revenue on this transaction?
   a. $0
   b. $190,581
   c. $309,419
   d. $500,000
28. On January 1, 1997, Hooks Oil Co. sold equipment with a carrying amount of $100,000, and a remaining useful life of 10 years, to Maco Drilling for $150,000 Hooks immediately leased the equipment back under a 10-year capital lease with a present value of $150,000 and will depreciate the equipment using the straight-line method. Hooks made the first annual lease payment of $24,412 in December 1997. In Hooks' December 31, 1997, balance sheet, the unearned gain on equipment sale should be

- a. $50,000
- b. $45,000
- c. $25,588
- d. $0

LEASES—REVIEW QUESTIONS

29. Farm Co. leased equipment to Union Co. on July 1, 2001, and properly recorded the sales-type lease at $135,000, the present value of the lease payments discounted at 10%. The first of eight annual lease payments of $20,000 due at the beginning of each year was received and recorded on July 3, 2001. Farm had purchased the equipment for $110,000. What amount of interest revenue from the lease should Farm report in its 2001 income statement?

- a. $0
- b. $5,500
- c. $5,750
- d. $6,750

30. On January 1, 1996, Park Co. signed a 10-year operating lease for office space at $96,000 per year. The lease included a provision for additional rent of 5% of annual company sales in excess of $500,000. Park's sales for the year ended December 31, 1996, were $600,000. Upon execution of the lease, Park paid $24,000 as a bonus for the lease. Park's rent expense for the year ended December 31, 1996, is

- a. $98,400
- b. $101,000
- c. $103,400
- d. $125,000

31. On January 1, 1997, JCK Co. signed a contract for an eight-year lease of its equipment with a 10-year life. The present value of the 16 equal semiannual payments in advance equaled 85% of the equipment’s fair value. The contract had no provision for JCK, the lessor, to give up legal ownership of the equipment. Should JCK recognize rent or interest revenue in 1999, and should the revenue recognized in 1999 be the same or smaller than the revenue recognized in 1998?

<table>
<thead>
<tr>
<th>1999 revenues recognized</th>
<th>1999 amount recognized compared to 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Rent</td>
<td>The same</td>
</tr>
<tr>
<td>b. Rent</td>
<td>Smaller</td>
</tr>
<tr>
<td>c. Interest</td>
<td>The same</td>
</tr>
<tr>
<td>d. Interest</td>
<td>Smaller</td>
</tr>
</tbody>
</table>

32. At the inception of a capital lease, the guaranteed residual value should be

- a. Included as part of minimum lease payments at present value.
- b. Included as part of minimum lease payments at future value.
- c. Included as part of minimum lease payments only to the extent that guaranteed residual value is expected to exceed estimated residual value.
- d. Excluded from minimum lease payments.

33. On December 31, 1996, Bain Corp. sold a machine to Ryan and simultaneously leased it back for one year. Pertinent information at this date follows:

- Sales price: $360,000
- Carrying amount: $330,000
- Present value of reasonable lease rentals ($3,000 for 12 months @ 12%): $34,100
- Estimated remaining useful life: 12 years

In Bain's December 31, 1996, balance sheet, the deferred revenue from the sale of this machine should be

- a. $34,100
- b. $30,000
- c. $4,100
- d. $0
34. An office equipment representative has a machine for sale or lease. If you buy the machine, the cost is $7,596. If you lease the machine, you will have to sign a noncancelable lease and make 5 payments of $2,000 each. At the time of the last payment you will receive title to the machine. The first payment will be made on the first day of the lease. The present value of an ordinary annuity of $1 is as follows:

<table>
<thead>
<tr>
<th>Number of Periods</th>
<th>10%</th>
<th>12%</th>
<th>16%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.909</td>
<td>0.893</td>
<td>0.862</td>
</tr>
<tr>
<td>2</td>
<td>1.736</td>
<td>1.690</td>
<td>1.605</td>
</tr>
<tr>
<td>3</td>
<td>2.487</td>
<td>2.402</td>
<td>2.246</td>
</tr>
<tr>
<td>4</td>
<td>3.170</td>
<td>3.037</td>
<td>2.798</td>
</tr>
<tr>
<td>5</td>
<td>3.791</td>
<td>3.605</td>
<td>3.274</td>
</tr>
</tbody>
</table>

The interest rate implicit in this lease is approximately
a. 10%.
b. 12%.
c. Between 10% and 12%.
d. 16%.

35. As an inducement to enter a lease, Arts, Inc., a lessor, grants Hampson Corp., a lessee, nine months of free rent under a five-year operating lease. The lease is effective on July 1, 1995, and provides for monthly rental of $1,000 to begin April 1, 1996. In Hampson's income statement for the year ended June 30, 1996, rent expense should be reported as
a. $10,200
b. $9,000
c. $3,000
d. $2,550

36. Rapp Co. leased a new machine to Lake Co. on January 1, 2001. The lease expires on January 1, 2001. The annual rental is $90,000. Additionally, on January 1, 1996, Lake paid $50,000 to Rapp as a lease bonus and $25,000 as a security deposit to be refunded upon expiration of the lease. In Rapp's 1996 income statement, the amount of rental revenue should be
a. $140,000
b. $125,000
c. $100,000
d. $90,000

37. In the long-term liabilities section of its balance sheet at December 31, 1999, Mene Co. reported a capital lease obligation of $75,000, net of current portion of $1,364. Payments of $9,000 were made on both January 2, 2000, and January 2, 2001. Mene's incremental borrowing rate on the date of the lease was 11% and the lessor's implicit rate, which was known to Mene, was 10%. In its December 31, 2000, balance sheet, what amount should Mene report as capital lease obligation, net of current portion?
a. $66,000.
b. $73,500.
c. $73,636.
d. $74,250.

38. Oak Co. leased equipment for its entire nine-year useful life, agreeing to pay $50,000 at the start of the lease term on December 31, 1998, and $50,000 annually on each December 31 for the next eight years. The present value on December 31, 1998, of the nine lease payments over the lease term, using the rate implicit in the lease which Oak knows to be 10%, was $316,500. The December 31, 1998, present value of the lease payments using Oak's incremental borrowing rate of 12% was $298,500. Oak made a timely second lease payment. What amount should Oak report as capital lease liability in its December 31, 1999, balance sheet?
a. $350,000.
b. $243,150.
c. $228,320.
d. $0.

39. Lease A does not contain a bargain purchase option, but the lease term is equal to 90 percent of the estimated economic life of the leased property. Lease B does not transfer ownership of the property to the lessee by the end of the lease term, but the lease term is equal to 75 percent of the estimated economic life of the leased property. How should the lessee classify these leases?

<table>
<thead>
<tr>
<th>Lease A</th>
<th>Lease B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating lease</td>
<td>Capital lease</td>
</tr>
<tr>
<td>Operating lease</td>
<td>Operating lease</td>
</tr>
<tr>
<td>Capital lease</td>
<td>Capital lease</td>
</tr>
<tr>
<td>Capital lease</td>
<td>Operating lease</td>
</tr>
</tbody>
</table>
RECENTLY DISCLOSED QUESTION

40. On January 2, 1995, Marx Co. as lessee signed a five-year noncancelable equipment lease with annual payments of $200,000 beginning December 31, 1995. Marx treated this transaction as a capital lease. The five lease payments have a present value of $758,000 at January 2, 1995, based on interest of 10%. What amount should Marx report as interest expense for the year ended December 31, 1995?
   a. $0.
   b. $48,000.
   c. $55,800.
   d. $75,800.

PENSIONS

PENSION COST (EXPENSE)

41. The following information pertains to the 20X7 activity of Ral Corp.’s defined benefit pension plan:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service cost</td>
<td>300,000</td>
</tr>
<tr>
<td>Return on plan assets</td>
<td>80,000</td>
</tr>
<tr>
<td>Interest cost on pension benefit obligation</td>
<td>164,000</td>
</tr>
<tr>
<td>Amortization of actuarial loss</td>
<td>30,000</td>
</tr>
<tr>
<td>Amortization of unrecognized prior service cost</td>
<td>70,000</td>
</tr>
</tbody>
</table>

Ral’s 20X7 pension cost was
   a. $316,000
   b. $484,000
   c. $574,000
   d. $644,000

42. The following information pertains to Lee Corp.’s defined benefit pension plan for 20X8:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service cost</td>
<td>160,000</td>
</tr>
<tr>
<td>Actual and expected return on plan assets</td>
<td>35,000</td>
</tr>
<tr>
<td>Unexpected loss on plan assets related to a 20X8 disposal of a segment</td>
<td>40,000</td>
</tr>
<tr>
<td>Amortization of unrecognized prior service cost</td>
<td>5,000</td>
</tr>
<tr>
<td>Annual interest on pension obligation</td>
<td>50,000</td>
</tr>
</tbody>
</table>

What amount should Lee report as pension expense in its 20X8 income statement?
   a. $250,000
   b. $220,000
   c. $210,000
   d. $180,000

PENSION ASSET/LIABILITY

43. Jerry Corp., a company whose stock is publicly traded, provides a noncontributory defined benefit pension plan for its employees. The company’s actuary has provided the following information for the year ended December 31, 20X5.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected benefit obligation</td>
<td>400,000</td>
</tr>
<tr>
<td>Plan assets (fair value)</td>
<td>410,000</td>
</tr>
<tr>
<td>Service cost</td>
<td>120,000</td>
</tr>
<tr>
<td>Interest on projected benefit obligation</td>
<td>12,000</td>
</tr>
<tr>
<td>Amortization of unrecognized prior service cost</td>
<td>30,000</td>
</tr>
<tr>
<td>Expected and actual return on plan assets</td>
<td>41,000</td>
</tr>
</tbody>
</table>

The market-related asset value equals the fair value plan assets. Prior contributions to the defined benefit pension plan equaled the amount of net periodic pension cost accrued for the previous year end. No contributions have been made for 20X5 pension cost. In its December 31, 20X5 balance sheet, Jerry should report an accrued pension cost of
   a. $99,000
   b. $121,000
   c. $162,000
   d. $132,000

PRIOR SERVICE COST

44. Jan Corp. amended its defined benefit pension plan, granting a total credit of $100,000 to four employees for services rendered prior to the plan’s adoption. The employees, A, B, C, D, are expected to retire from the company as follows:
   “A” will retire after three years.
   “B” and “C” will retire after five years.
   “D” will retire after seven years.

What is the amount of prior service cost amortization in the first year?
   a. $0
   b. $5,000
   c. $20,000
   d. $25,000

General

45. On January 2, 20X9, Loch Co. established a noncontributory defined benefit plan covering all employees and contributed $1,000,000 to the plan. At December 31, 20X9, Loch determined that the 20X9 service and interest costs on the plan were $620,000. The expected and the actual rate of return on plan assets for 20X9 was 10%. There are not other components of Loch’s pension expense. What
amount should Loch report in its December 31, 20X9, balance sheet as prepaid pension cost?

a. $280,000  
b. $380,000  
c. $480,000  
d. $620,000  

46. Questions 46, 47, 48 are based on the following:

The Granger Company had the following information about its pension plan for 20X8:

1. Projected benefit obligation (PBO) January 1. $400,000
2. The company granted prior service benefits to employees on January 1 80,000
3. Service cost 60,000
4. Settlement rates 10%
5. Expected and actual return on plan assets 15,000
6. Actual funding contributions 175,000
7. Amortization of prior service cost 20,000
8. Benefits paid 18,000
9. Accumulated other comprehensive income balance at January 1 -0-
10. The actuaries increased the projected benefit obligation on December 31, 20X8 70,000

Calculate pension expense
a. $105,000  
b. $120,000  
c. $185,000  
d. $ 95,000  

47. In recording the 20X8 journal entry, Granger should credit the Pension asset/liability account for what amount?

a. $100,000  
b. $90,000  
c. $80,000  
d. $60,000  

48. The December 31, 20X8 balance in accumulated other comprehensive income would be

a. $150,000 debit  
b. $150,000 credit  
c. $130,000 debit  
d. $130,000 credit  

PROJECTED BENEFIT OBLIGATION

49. The following information pertains to Seda Co.’s pension plan:

Actuarial estimate of projected benefit obligation at 1/1/20X6 $72,000
Assumed discount rate 10%
Service costs for 20X6 $18,000
Pension benefits paid during 20X6 $15,000

If no change in actuarial estimates occurred during 1996, Seda’s projected benefit obligation at December 31, 20X6 was

a. $64,200  
b. $75,000  
c. $79,200  
d. $82,200  

ACTUAL RETURN ON PLAN ASSETS

50. The following information pertains to Gali Co.’s defined benefit pension plan for 20X9:

Fair value of plan assets, beginning of year $350,000
Fair value of plan assets, end of year 525,000
Employer contributions 110,000
Benefits paid 85,000

In computing pension expense, what amount should Gali use as actual return on plan assets?

a. $65,000  
b. $150,000  
c. $175,000  
d. $260,000  

CORRIDOR APPROACH

51. Mercer, Inc. had the following information available on its pension plan for 20X9:

Projected benefit obligation Jan 1 $1,000,000
Projected benefit obligation Dec 31 1,300,000
Market related value of plan assets Jan 1 800,000
Market related value of plan assets Dec 31 850,000
Cumulative unrecognized loss Jan 1 200,000
Cumulative unrecognized loss Dec 31 230,000
Average remaining service period 5 years
Calculate the amortization of the cumulative unrecognized loss to be included in pension expense for 20X9.

a. $14,000
b. $20,000
c. $24,000
d. $23,000

52. The following information pertains to Kane Co.’s defined benefit pension plan for 20X8:

Pension Asset/Liability January 1 $ 2,000 Db.
Service cost 19,000
Interest cost 38,000
Actual return on plan assets 22,000
Amortization of unrecognized prior service cost 52,000
Employer contributions 40,000
Expected return on plan assets 18,000

In its December 31, 20X8 balance sheet, what amount should Kane report as pension asset/liability?

a. $10,000 credit
b. $12,000 debit
c. $ 7,000 debit
d. $ 8,000 credit

53. Interest cost included in the net pension cost recognized by an employer sponsoring a defined benefit pension plan represents the

a. Amortization of the discount on unrecognized prior service costs.
b. Increase in the fair value of plan assets due to the passage of time.
c. Increase in the projected benefit obligation due to the passage of time.
d. Shortage between the expected and actual returns on plan assets

54. For a defined benefit pension plan, the discount rate used to calculate the projected benefit obligation is determined by the

<table>
<thead>
<tr>
<th>Expected return on plan assets</th>
<th>Actual return on plan assets</th>
</tr>
</thead>
</table>
a. Yes                          | Yes                         |
b. No                           | No                          |
c. Yes                          | No                          |
d. No                           | Yes                         |

55. On July 31, 20X8, Tern Co. amended its single employee defined benefit pension plan by granting increased benefits for services provided prior to 20X8. This prior service cost will be reflected in the financial statement(s) for

a. Years before 20X8 only
b. Year 20X8.
c. Year 20X8, and years before and following 20X8.
d. Year 20X8, and following years only.

56. Which of the following information should be disclosed by a company providing health care benefits to its retirees?

I. The assumed health care cost trend rate used to measure the expected cost of benefits covered by the plan.
II. The accumulated post-retirement benefit obligation.

a. I and II.
b. I only.
c. II only.
d. Neither I nor II.

57. Bounty Co. provides postretirement health care benefits to employees who have completed at least 10 years service and are aged 55 years or older when retiring. Employees retiring from Bounty have a median age of 62, and no one has worked beyond aged 65. Fletcher is hired at 48 years old. The attribution period for accruing Bounty’s expected postretirement health care benefit obligation to Fletcher is during the period when Fletcher is aged.

a. 48 to 65
b. 48 to 58
c. 55 to 65
d. 55 to 62

58. An employer’s obligation for postretirement health benefits that are expected to be provided to or for an employee must be fully accrued by the date the

a. Employee is fully eligible for benefits
b. Employee retires.
c. Benefits are utilized.
d. Benefits are paid.
59. The Hildreth Company sponsors a postretirement benefit plan for its employees. On January 1, 20X9 the following balances relate to the plan:

- Expected postretirement benefit obligation (EPB) $500,000
- Fair value of plan assets $385,000

As a result of the operations of the plan during 20X9, the following data are provided:

- Service cost for 20X9 $80,000
- Interest/discount/settlement rate 8%
- Actual return on plan assets 27,000
- Expected return on plan assets 29,000

Calculate the amount to appear on Hildreth’s 20X9 income statement for postretirement benefits expense.

a. $83,000  
b. $77,000  
c. $87,000  
d. $85,000

60. The Burke company sponsors a postretirement benefit plan for its employees. On January 1, 20X9, the following balances relate to the plan:

- Expected postretirement benefit obligation $500,000
- Accumulated postretirement benefit obligation 400,000
- Fair value of plan assets 385,000
- Market related value of plan assets 350,000
- Cumulative unrecognized loss 100,000

Calculate the corridor amount to be used for the amortization of the cumulative unrecognized loss.

a. $50,000  
b. $40,000  
c. $35,000  
d. $38,500

**ADDITIONAL REVIEW QUESTIONS**

61. Cott, Inc. prepared an interest amortization table for a five-year lease payable with a bargain purchase option of $2,000, exercisable at the end of the lease. At the end of the five years, the balance in the leases payable column of the spreadsheet was zero. Cott has asked Grant, CPA, to review the spreadsheet to determine the error. Only one error was made on the spreadsheet. Which of the following statements represents the best explanation for this error?

a. The beginning present value of the lease did not include the present value of the bargain purchase option.  
b. Cott subtracted the annual interest amount from the lease payable balance instead of adding it.  
c. The present value of the bargain purchase option was subtracted from the present value of the annual payments.  
d. Cott discounted the annual payments as an ordinary annuity, when the payments actually occurred at the beginning of each period.

62. Douglas Co. leased machinery with an economic useful life of six years. For tax purposes, the depreciable life is seven years. The lease is for five years, and Douglas can purchase the machinery at fair market value at the end of the lease. What is the depreciable life of the leased machinery or financial reporting?

a. Zero  
b. Five years  
c. Six years  
d. Seven years

63. Crane Mfg. leases a machine from Frank Leasing. Ownership of the machine returns to Frank after the 15-year lease expires. The machine is expected to have an economic life of 17 years. At this time, Frank is unable to predict collectability of the lease payments to be received from Crane. the present value of the minimum lease payments exceed 90% of the fair value of the machine. What is the appropriate classification of this lease for Crane?

a. Operating  
b. Leveraged  
c. Capital  
d. Installment

**RECENTLY RELEASED QUESTIONS**

64. Jan Corp. amended its defined benefit pension plan, granting a total credit of $100,000 to four employees for services rendered prior to the plan’s adoption. The employees, A, B, C, and D, are expected to retire from the company as follows:

- “A” will retire after three years.  
- “B” and “C” will retire after five years.  
- “D” will retire after seven years.

What is the amount of prior service cost amortization in the first year?

a. $0  
b. $5,000  
c. $20,000  
d. $25,000
65. On January 2, 1995, Loch Co. established a noncontributory defined-benefit pension plan covering all employees and contributed $400,000 to the plan. At December 31, 1995, Loch determined that the 1995 service and interest costs on the plan were $720,000. The expected and the actual rate of return on plan assets for 1995 was 10%. There are no other components of Loch’s pension expense. What amount should Loch report as accrued pension cost in its December 31, 1995 balance sheet?
   a. $280,000
   b. $320,000
   c. $360,000
   d. $720,000

66. Cott, Inc. prepared an interest amortization table for a five-year lease payable with a bargain purchase option of $2,000, exercisable at the end of the lease. At the end of the five years, the balance in the leases payable column of the spreadsheet was zero. Cott has asked Grant, CPA, to review the spreadsheet to determine the error. Only one error was made on the spreadsheet. Which of the following statements represents the best explanation for this error?
   a. The beginning present value of the lease did not include the present value of the bargain purchase option.
   b. Cott subtracted the annual interest amount from the lease payable balance instead of adding it.
   c. The present value of the bargain purchase option was subtracted from the present value of the annual payments.
   d. Cott discounted the annual payments as an ordinary annuity, when the payments actually occurred at the beginning of each period.

67. Which of the following disclosures is not required of companies with a defined-benefit pension plan?
   a. A description of the plan
   b. The amount of pension expense by component
   c. The weighted average discount rate
   d. The estimates of future contributions

68. Douglas Co. leased machinery with an economic useful life of six years. For tax purposes, the depreciable life is seven years. The lease is for five years, and Douglas can purchase the machinery at fair market value at the end of the lease. What is the depreciable life of the leased machinery for financial reporting?
   a. Zero
   b. Five years
   c. Six years
   d. Seven years

69. Crane Mfg. Leases a machine from Frank Leasing. Ownership of the machine returns to Frank after the 15-year lease expires. The machine is expected to have an economic life of 17 years. At this time, Frank is unable to predict collectability of the lease payments to be received from Crane. The present value of the minimum lease payments exceed 90% of the fair value of the machine. What is the appropriate classification of this lease for Crane?
   a. Operating
   b. Leveraged
   c. Capital
   d. Installment

70. Koby Co. entered into a capital lease with a vendor for equipment on January 2 for seven years. The equipment has no guaranteed residual value. The lease required Koby to pay $500,000 annually on January 2, beginning with the current year. The present value of an annuity due for seven years was 5.35 at the inception of the lease. What amount should Koby capitalize as leased equipment?
   a. $500,000
   b. $825,000
   c. $2,675,000
   d. $3,500,000

71. An employer’s obligation for postretirement health benefits that are expected to be fully provided to or for an employee must be fully accrued by the date the
   a. Benefits are paid.
   b. Benefits are utilized.
   c. Employee retires.
   d. Employee is fully eligible for benefits.

72. Which of the following is a criterion for a lease to be classified as a capital lease in the books of a lessee?
   a. The lease contains a bargain purchase option.
   b. The lease does not transfer ownership of the property to the lessee.
   c. The lease term is equal to 65% or more of the estimated useful life of the leased property.
   d. The present value of the minimum lease payments is 70% or more of the fair market value of the leased property.

73. Steam Co. acquired equipment under a capital lease for six year. Minimum lease payments were $60,000 payable annually at year-end. The interest rate was 5% with an annuity factor for six years of 5.0757. The present value of the payments was equal to the fair market value of the equipment. What amount should Steam report as interest expense at the end of the first year of the lease?
   a. $0
   b. $3,000
   c. $15,227
   d. $18,000
74. Which of the following is a characteristic of a capital lease?
   a. The lease term is substantially less than the estimated economic life of the leased property.
   b. The lease contains a bargain-purchase option.
   c. The present value of the minimum lease payments at the beginning of the lease term is 75% or more of the fair value of the property at the inception of the lease.
   d. The future obligation does not appear in the balance sheet of the lessee.

**IFRS - LEASES**

75. Johnson International leases equipment for 5 years at an annual lease payment of $10,000 per year. At the end of the lease term the equipment has a fair value of $1,000 but Johnson has the option of purchasing the equipment for $50. The useful life of the equipment is six years. Johnson should record the lease as a
   a. Direct Financing Lease
   b. Operating Lease
   c. Finance Lease
   d. Capital Lease

76. Elliot International leaves land and building for $100,000 per year. Under IFRS the building qualifies as a finance lease, but the title to the land does not transfer at the end of the lease. How should Elliot record the lease?
   a. Land as an operating lease and building as a finance lease
   b. Both as capital leases
   c. Both as finance leases
   d. Both as operating leases

**IFRS - PENSIONS**

77. In the US the basic theory used in accounting for defined benefit pension plans is the benefit-years-of-service approach. What is the equivalent approach in IFRS?
   a. Vesting years of service
   b. Unvested years of service
   c. Accumulated benefits method
   d. Projected-unit-credit method

78. ABC International contributes $70,000 to its defined contribution plan for Year 6. The remaining service lives for its employees is 10 years. The vesting period is 7 years. Under IFRS, what amount should be charged to pension expense?
   a. $7,000
   b. $10,000
   c. $70,000
   d. $35,000

79. Harden International has a cumulative unrecognized actuarial loss of $80,000. The estimated remaining service lives of its employees is 10 years. The vesting period is 8 years. Under IFRS, what is the maximum amount that could be recognized for the actuarial loss for the current year?
   a. $80,000
   b. $10,000
   c. $15,000
   d. $8,000

80. Winston International has a total of $200,000 in prior service cost at January 1, Year 6. The remaining service lives of its employees is 10 years. The vesting period is 20 years. What amount of prior service cost should be recognized in its income statement for Year 6 under IFRS?
   a. $10,000
   b. $200,000
   c. $100,000
   d. $20,000

81. On January 1, Year 5, GC International amended its pension plan to provide an additional $800,000 in prior service cost. Employees vest in the plan in 5 years. The average remaining service life of its employees is 10 years. The prior service cost is allocated as follows:

<table>
<thead>
<tr>
<th>Employees with 5 years or more of service as of January 1</th>
<th>$500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees with less than 5 years of service as of January 1</td>
<td>$300,000</td>
</tr>
<tr>
<td>Total</td>
<td>$800,000</td>
</tr>
</tbody>
</table>

How much would the company recognize on its income statement for the current year for the prior service costs under IFRS?
   a. $500,000
   b. $300,000
   c. $80,000
   d. $530,000
Chapter Fourteen
Accounting for Leases, Pension and Postretirement Plans Problems

NUMBER 1

Part a.
The Jackson Company manufactured a piece of equipment at a cost of $7,000,000 which it held for resale from January 1, 1999 to June 30, 1999 at a price of $8,000,000. On July 1, 1999, Jackson leased the equipment to the Crystal Company. The lease is appropriately recorded as an operating lease for accounting purposes. The lease is for a three-year period expiring June 30, 2002. Equal monthly payments under the lease are $115,000 and are due on the first of the month. The first payment was made on July 1, 1999. The equipment is being depreciated on a straight-line basis over an eight-year period with no residual value expected.

Required:
1. What expense should Crystal appropriately record as a result of the above facts for the year ended December 31, 1999? Show supporting computations in good form.
2. What income or loss before income taxes should Jackson appropriately record as a result of the above facts for the year ended December 31, 1999? Show supporting computations in good form.

Part b.
The Truman Company leased equipment from the Roosevelt Company on October 1, 1999. The lease is appropriately recorded as a capitalized lease for accounting purposes for Truman and as a sales type lease for accounting purposes for Roosevelt. The lease is for an eight-year period. Equal annual payments under the lease are $600,000 and are due on October 1 of each year. The first payment was made on October 1, 1999. The cost of the equipment on Roosevelt's accounting records was $3,000,000. The equipment has an estimated useful life of eight years with no residual value expected. Truman uses straight-line depreciation and takes a full year's depreciation in the year of purchase. The rate of interest contemplated by Truman and Roosevelt is 10%. The present value of an annuity of $1 in advance for eight periods at 10% is 5.868.

Required:
1. What expense should Truman appropriately record as a result of the above facts for the year ended December 31, 1999? Show supporting computations in good form.
2. What income or loss before income taxes should Roosevelt appropriately record as a result of the above facts for the year ended December 31, 1999? Show supporting computations in good form.
NUMBER 2
On January 2, 1999, Elsee Co. leased equipment from Grant, Inc. Lease payments are $100,000, payable annually every December 31 for twenty years. Title to the equipment passes to Elsee at the end of the lease term. The lease is noncancelable.

Additional facts:
- The equipment has a $750,000 carrying amount on Grant’s books. Its estimated economic life was 25 years on January 2, 1999.
- The rate implicit in the lease, which is known to Elsee, is 10%. Elsee’s incremental borrowing rate is 12%.
- Elsee uses the straight-line method of depreciation.

The rounded present value factors of an ordinary annuity for 20 years are as follows:

<table>
<thead>
<tr>
<th>Rate</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>12%</td>
<td>7.5</td>
</tr>
<tr>
<td>10%</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Required:
Prepare the necessary journal entries, without explanations, to be recorded by Elsee for:
1. entering into the lease on January 2, 1999.
2. making the lease payment on December 31, 1999.
3. expenses related to the lease for the year ended December 31, 1999.

NUMBER 3
Deck Co. has just hired a new president, Palmer, and is reviewing its employee benefit plans with the new employee. For current employees, Deck offers a compensation plan for future vacations. Deck also provides postemployment benefits to former or inactive employees.

On the date of Palmer’s hire, Palmer entered into a deferred compensation contract with Deck. Palmer is expected to retire in ten years. The contract calls for a payment of $150,000 upon termination of employment following a minimum three-year service period. The contract also provides that interest of 10%, compounded annually, be credited on the amount due each year after the third year.

Required:

a. Give an example of postemployment benefits. State the conditions under which Deck is required to accrue liabilities for compensated absences and postemployment benefits. State Deck’s disclosure requirements if these conditions, in full or in part, are not met.

b. Describe the general accrual period for amounts to be paid under a deferred compensation contract. State the theoretical rationale for requiring accrual of these liabilities and related expenses.

c. Prepare a schedule of the expense and accrued liability related to Palmer’s deferred compensation agreement to be reported in Deck’s financial statements for the first four years of the contract.
NUMBER 4

On January 2, 2001, Cody, Inc. sold equipment to Griff Co. for cash of $864,000 and immediately leased it back under a capital lease for 9 years. The carrying amount of the equipment was $540,000, and its estimated remaining economic life is 10 years. Annual year-end payments of $153,000, which include executory costs of $3,000, are based on an implicit interest rate of 10%, which is known to Cody. Cody's incremental borrowing rate is 13%. Cody uses the straight-line method of depreciation. The rounded present value factors of an ordinary annuity for 9 years are 5.76 at 10% and 5.2 at 13%.

Required:

a. What is the theoretical basis for requiring lessees to capitalize certain long-term leases? Do not discuss the specific criteria for classifying a lease as a capital lease.

b. Prepare the journal entries that Cody must make to record the sale and the leaseback on January 2, 2001.

c. Prepare the journal entries, including any adjusting entries, that Cody must make at December 31, 2001.
Chapter Fourteen
Solutions to Accounting for Leases, Pension and Postretirement Plans Questions

1. (b) ASC 405 states that a lease should be capitalized if at its inception the lease term is 75% or more of the economic life of the leased asset. An exception to this rule applies if the beginning of the lease term is within the last 25% of the economic life of the leased asset. In that case the lease would be considered an operating lease.

2. (b) ASC 405 states that if either of the four criteria for lease capitalization is met, the lease should be capitalized. Both Lease M and Lease P qualify as capitalized leases because their lease terms meet the criterion for 75% or more of the estimated economic life of the leased property.

3. (b) The lease is a capitalized lease since the lease term is 75% or more of the useful life of the asset. Since the rental payments are made at the end of the period, the present value of an ordinary annuity factor is used.

\[ 6.15 \times \$100,000 = \$615,000. \]

4. (b) Annual payments $100,000
   Present value factor 6.145
   Capitalized lease liability $614,500

The lower of the rate implicit in the lease (10%) or the lessee's incremental borrowing rate (12%) is used. Note that payments are made at the end of the period and the present value factor given is for an ordinary annuity. Therefore, the payment stream is consistent with the factor.

5. (a) The capitalized lease liability should be the annual lease payments less the executory cost (real estate taxes) times the present value factor for an ordinary annuity of 1 for nine years at 9%. The calculation would be: \((\$52,000 - 2,000) \times 5.6 = \$280,000.\) The real estate taxes are a period cost and should be charged to expense.

6. (c) Since the 12% interest rate implicit in the lease is less than the 14% incremental borrowing rate, the 12% rate is used. The minimum lease payments include the option payment since it is a bargain purchase option.

\[
\begin{align*}
\text{Present value of lease payments:} & \quad 6.328 \times \$10,000 = \$63,280 \\
\text{Present value of option payment:} & \quad .322 \times \$10,000 = 3,220 \\
\text{Lease liability at the beginning of the lease term} & \quad \$66,500
\end{align*}
\]

7. (a) Present value of lease payments—\(\$13,000 \times 4.240\) $55,120
   Initial payment $13,000
   Present value of guaranteed residual $10,000 \times .65 = 6,500
   Capital lease liability at 1/1/97 $48,620

The guaranteed residual value is considered part of the minimum lease payments.

8. (a) The interest expense for 1998 is $37,900—the effective interest rate (10%) times the January 1, 1998, present value ($379,000).
9. (b) Present value at 1/1/97 $112,500
   Payment made 12/30/97 $10,000
   Interest portion for 1997 (8% × $112,500) 9,000
   Portion applied to the liability 1,000
   Capital lease liability 12/31/97 $111,500

10. (b) The lesser of the rate implicit in the lease (10%) or the lessee's incremental borrowing rate (12%) is used. Present value of lease payments: 6.1446 × $10,000 = $61,446. The guarantee of the residual value is not related to the lessee's accounting.

11. (b) Since the first lease payment is on the first day of the lease, the total lease liability at December 31, 1998, is $115,000, the total lease minus the first payment ($135,000 – $20,000). To divide the December 31 liability into its current vs. noncurrent portions, it is helpful to look at the 1999 journal entry:

   Interest expense* $11,500
   Lease liability 8,500
   Cash 20,000

   *Effective interest rate

   10% × PV of lease at Jan. 1 = Interest
   $115,000 = $11,500

   The portion of the $20,000 lease payment used to reduce the lease liability ($8,500) in 1999 would be considered a current liability at December 31, 1998.

12. (a) The portion of the lease payment which will reduce the lease obligation in year 2 is shown as a current liability at the end of year 1. The payments reduce an increased amount of the liability each year.

13. (b) The key point is that title passes to Cole at the lease expiration. This means that Cole has use of the asset for its total life and should use 12 years for the calculation of depreciation. The depreciation for 1998 would be $9,000, the total cost of $108,000 divided by the useful life of 12 years.

14. (d) In a capital lease with a bargain purchase option, the lessee will control the asset for its total useful life. Therefore, the depreciation should be allocated over the 8-year life of the asset.

   $240,000 cost – 20,000 salvage value = 220,000 / 8 years = $27,500 per year

15. (c) South Co. should disclose a description of the lease agreement, annual rent obligations of $100,000 per year for each of the next five years, and the $900,000 ($100,000 × 9 years) aggregate total future payments. The $20,000 paid for annual operating cost are period expenses and would not be disclosed as a part of the future lease obligations.

16. (a) Normal sales price (equivalent to present value of lease payments) $77,000
   Cost 60,000
   Gain recognized $17,000

Since there are no material uncertainties, the gain is recognized in full. No interest is recognized since the inception date is on the last day of the year.

17. (b)

   Sales price is the present value of lease payments $3,300,000
   Less carrying value of the equipment 2,800,000
   Gross profit on sale recognized in 1999 $500,000

Note: The list price of an asset is not always an indicator of FMV. In many cases an asset may be purchased at less than FMV.
18. (b) The profit on the sale is the difference between the cash selling price and the book value, $3,520,000 – $2,800,000 = $720,000. The interest is computed as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value of minimum lease payments and lease obligation, 7/1/95</td>
<td>$3,520,000</td>
</tr>
<tr>
<td>Initial payment made 7/1/95</td>
<td>$600,000</td>
</tr>
<tr>
<td>Liability balance</td>
<td>$2,920,000</td>
</tr>
<tr>
<td>Interest rate 10%</td>
<td>$292,000</td>
</tr>
<tr>
<td>For one-half year</td>
<td>$146,000</td>
</tr>
</tbody>
</table>

19. (c) In both a sales-type and a direct financing lease, interest revenue is recognized over the lease term using the interest method.

20. (a) The key point is to first calculate the annual payments required by the lease. Use the basic present value formula: Annual Payments X Present Value Factor = Present Value of Future Payments. Therefore: Annual Payments X 4.312 = $323,400; Annual payments = $323,400/4.312; Annual payments = $75,000. Then multiply the customer's $75,000 annual payment by 5 years for a total of $375,000. This figure represents Glade Co.'s gross Lease Receivable. The difference between the gross Lease Receivable and the present value of the future payments is the total amount of Interest Revenue that will be earned over the life of the lease ($375,000 - $323,400 = $51,600).

21. (b)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>First month's rent</td>
<td>$10,000</td>
</tr>
<tr>
<td>Plus allocated portion of rent</td>
<td></td>
</tr>
<tr>
<td>bonus for June</td>
<td>$30,000/60 months</td>
</tr>
<tr>
<td>Total rent expense reported on the June 30, 2000 Income Statement</td>
<td>$10,500</td>
</tr>
</tbody>
</table>

22. (b) Under an operating lease, the rent revenue is allocated equally over the term of the lease unless there are differential benefits or rents contingent upon other events. For the first 24 months, the rent revenue would be recognized at $1,000 per month or $24,000 and the collections would only have been $15,000 under the terms of the lease. Therefore, the receivable would be $9,000.

23. (c) ASC 405 states that rental revenue from an operating lease should be recognized on a straight-line basis unless an alternative basis of systematic and rational allocation is more representative of the time pattern of physical use. In this case the physical use pattern is the same for all five years and the total rent received of $54,000 ($4,000 for year one plus $50,000 for years two through five) should be allocated equally over the five year period. The rental income recognized for 1999 would be $10,800 ($54,000 / 5 years).

24. (a) The first point is that the rental agreement includes a fixed rental amount. The fixed rental is shown on the vertical axis at the point where lines I and II begin. Lines III and IV do not include a fixed rental and cannot be the correct answer. The second point is that as the variable rental increases, it does so at a decreasing rate. Line II is bending upwards which indicates an increasing variable rate so line II cannot be correct. Line I includes the fixed amount of rent and a variable rental that is increasing at a decreasing rate. Line I is the correct answer.

25. (c) Leasehold improvements are capitalized and amortized over the lesser of the remaining life of the lease (6 years) and the useful life of the improvements (8 years). In this case the $48,000 is amortized over 6 years resulting in an annual rate of $8,000 per year or $4,000 for six months.

The problem requires the amount of leasehold improvements net of amortization that should be reported on the balance sheet six months after the improvements were made. The amount reported should be $44,000, the original cost ($44,000) less six months amortization ($4,000).
26. (a) Since the present value of the lease payments ($36,900) is less than 10% of the value of the asset ($400,000),
the entire $100,000 gain is recognized and none is deferred. The transaction represents a leaseback of a minor part
of the asset.

27. (b) Since the property is leased back for more than a minor part ($190,581 > $60,000) but less than substantially
all of the use of the property, the gain which is recognized is the excess of the gain ($500,000) over the present
value of the lease payments or $309,419. The portion of the gain which is deferred is the present value of the lease
payments ($190,581).

28. (b) The gain on the transaction must be fully deferred since the present value of the lease payments is equivalent
to the sales price. The gain of $50,000 is amortized over the life of the asset (capitalized lease) and therefore has a
balance of $45,000 at the end of 1997.

29. (c) The interest revenue is the present value of the Lease Receivable at July 1, 2001 less the first payment times
the effective interest rate for six months.
\[
($135,000 - $20,000) \times 10\% \times 6/12 = $5,750
\]

30. (c)  

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular annual rental</td>
<td>$96,000</td>
</tr>
<tr>
<td>Additional rent 5% × $100,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Amortization of bonus</td>
<td>2,400</td>
</tr>
<tr>
<td><strong>Total rent expense</strong></td>
<td><strong>$103,400</strong></td>
</tr>
</tbody>
</table>

31. (d) The lease period is 80% of the useful life of the equipment which exceeds the 75% that is necessary for the
lease to be a direct financing lease. The problem is silent concerning the other two criteria that must be present for
the lessor to consider this a capitalized lease: collectibility of minimum lease payments is predictable and no
important uncertainties exist concerning costs to be incurred in the future by the lessor. In a capitalized lease interest
revenue is recognized based on the effective interest rate times the present value of the lease at the beginning of the
period. Since a portion of each lease payment reduces the lease principal, the interest revenue recognized in 1999
will be smaller than that recognized in 1998.

32. (a) The guaranteed residual value is a promise made by the lessee that the lessor can sell the leased asset at the
end of the lease for a guaranteed amount. Since this promise is a potential future payment, it must be included in the
calculation of the present value of the lessee's future lease payments.

33. (d) Since the machine is being leased back for a minor part (present value of rentals is less than 10% of the
value of the property at the date of the sale-leaseback), the sale and the lease are viewed separately and the entire
$30,000 profit is recognized.

34. (d) 16%

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost if purchased outright</td>
<td>$7,596</td>
</tr>
<tr>
<td>Less: Payment on first day of lease</td>
<td>2,000</td>
</tr>
<tr>
<td>Present value of lease payments</td>
<td>$5,596</td>
</tr>
<tr>
<td>% amount of each payment</td>
<td>2,000</td>
</tr>
<tr>
<td>Present value of $1 ordinary annuity, 4 periods</td>
<td>$2.798</td>
</tr>
</tbody>
</table>

By reference to the table in the problem $2.798 = 16%.

35. (a) The rent payments totaling $51,000 must be spread over the periods benefited—5 years. Therefore, for the
year ended June 30, 1996, rent expense is computed as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total rental payments</td>
<td>$51,000</td>
</tr>
<tr>
<td>Number of years</td>
<td>5</td>
</tr>
<tr>
<td>Annual rent expense</td>
<td>$10,200</td>
</tr>
</tbody>
</table>
36. (c)

Annual rent $90,000
Amortization of bonus ($50,000 ÷ 5) 10,000
Total rent revenue $100,000

The security deposit is not revenue but a liability of the lessor.

37. (b) Mene Co.'s total lease obligation at December 31, 1999 was $76,364 ($75,000 + 1,364). The January 2, 2000 payment was split between the interest of $7,636 (10% × $76,364) and the lease obligation of $1,364. This payment reduced the total lease liability at December 31, 2000 to $75,000 ($76,364 – 1,364). The projected January 3, 2001 payment of $9,000 would be divided between the interest of $7,500 ($75,000 × 10%) and the principal of $1,500 ($9,000 – 1,500). Therefore, the total lease liability at December 31, 2000 of $75,000 would be allocated on the balance sheet between the $1,500 current portion payable on January 2, 2001 and the remainder of $73,500 which would be classified as a long-term liability.

38. (b) To calculate the present value of a capital lease, the lessee uses the lower of the lessor's implicit interest rate (if known to the lessee) or the lessee's incremental borrowing rate. In this case the lessor's implicit rate is lower and the amount capitalized is $316,500.

Present value of lease payments at 12/31/98 $316,500
Payment made on 12/31/98 (50,000)
Capital lease liability 12/31/98 266,500

Payment made on 12/31/99 (see below) (23,350)
Capital lease liability 12/31/99 $243,150

The journal entry for the second payment is:
Interest expense 26,650
Lease liability 23,350
Cash 50,000

Note: The interest expense is the effective interest rate times the present value of the lease liability at the beginning of the period (10% × $266,500 = $26,650).

39. (c) Since each lease contains a lease term equal to 75% or more of the economic life of the property, each is classified as a capital lease.

40. (d)

\[
\text{Interest Expense} = \text{Effective Interest Rate} \times \text{January 2, 1995 carrying value} \times \text{Time Period}
\]

\[
= 10\% \times $758,000 \times 1 \text{ year}
\]

\[
= $75,800
\]

41. (b) Current service cost $300,000
Interest on P.B.O. +164,000
Plan earnings - 80,000
Amortization of unrecognized prior service cost + 70,000
Amortization of actuarial loss + 30,000
20X7 pension cost $484,000
42. (d) Service cost $160,000
Interest cost 50,000
Return on assets (35,000)
Amortization of prior service cost 5,000
Pension expense $180,000

The loss from disposal of a segment is reported as part of discontinued operations and not part of pension expense.

43. (a) Pension cost consists of the following elements:

<table>
<thead>
<tr>
<th>Service Cost</th>
<th>$120,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest on P.B.O.</td>
<td>12,000</td>
</tr>
<tr>
<td>Amortization of prior service cost</td>
<td>30,000</td>
</tr>
</tbody>
</table>

Total $162,000

Less: Return on assets 41,000

Pension cost $121,000

The journal entry would be as follows:

Pension Expense 121,000
Pension Asset/Liability 99,000
Other Comp. Income-Prior Ser. cost 30,000

44. (c) Key Point: Prior service cost is amortized over the average remaining life of the employees. The calculation of the average remaining service life of the employees is to add the remaining service lives of A (3 years); B (5 years); C (5 years); and D (7 years) for a total of 20 years and divide by the number of employees (20 years/4 employees = 5 years). Therefore the amortization of the prior service cost is $100,000 divided by 5 years or $20,000.

45. (c)

Pension Costs $620,000
Less Return on Plan Assets (10% x $1,000,000) (100,000)
Pension Expense $520,000
Less contribution (1,000,000)
Prepaid pension cost 12/31/X9 $480,000

46. (a) Solution to pension expense:

1. Service cost $60,000
2. Interest on Jan 1, PBO 10% x 400,000 40,000
3. Expected and actual return (15,000)
4. Amortization of prior service cost 20,000
5. Amortization of gains/losses - 0 -
Total Pension Expense 105,000

47. (d) Solution

Pension expense $105,000 Debit
Prior service cost
$80,000 – 20,000 amortization 60,000 Debit
Increase in gains/losses 70,000 Debit
Less contribution 175,000 Debit
Increase in pension asset/liability 60,000
48. (c) Balance in unrecognized prior service cost
   $80,000-20,000 amortization 60,000 Debit

   Balance in unrecognized gains/losses 70,000 Debit

   Balance accumulated other comprehensive 130,000 Debit

49 (d). Projected benefit obligation 1/1/96 $72,000
   Interest in 1996 on PBO 7,200
   1996 service cost 18,000
   $97,200

   Pension benefits paid -15,000
   Projected Benefit Obligation at 12/31/96 $82,200

50. (b) The best approach on this question is to set up a “T” account and plug the missing number.

      PLAN ASSETS

      Beginning Balance 350,000
      Employer Contributions 110,000   Benefits Paid 85,000
      Actual return (Plug) 150,000

      Ending Balance 525,000

51. (b) Since the requirement is the amortization of the loss for 20X9, the January 1 numbers should be used in the calculation:

   **Step #1** – Calculate Corridor
   10% x January 1 PBO
   \( 10\% \times \$1,000,000 \)  $100,000
   \( 10\% \times \$800,000 \) 80,000

   Pick the higher number, $100,000, as the corridor.

   **Step #2** – Compare the Jan 1 loss
   to the corridor
   Amount to be amortized 100,000

   **Step #3** – Calculate the amount of amortization for 20X9
   Amount to be amortized (Step 2) 100,000
   divided by the average remaining service period 5 years
   Amortization amount to be included in part five of pension expense’ $20,000

14S-7
52. (c) **Pension Expense**

I. 1. Service Cost  19,000  
   2. Interest Cost   38,000  
   3. Actual Return  22,000  
       less unrecognized gain (4,000)  
       Expected Return (18,000)  
   4. Amortization prior service cost  52,000  
       Amortization gain/loss - 0 –  
       Total pension expense  91,000  

II. JE Pension Asset/Liability  5,000  
   Pension Expense 91,000  
   Other Comp Inc Gains/Losses  4,000  
   Other Comp Inc/Prior Service Cost  52,000  
   Cash  40,000  

III. Balance in Pension Asset/Liability  
   Jan 1 Balance  2,000 debit  
   20X9 Increase  5,000 debit  
   December 31, 20X9 Balance  7,000 debit  

53. (c) The interest cost component of net pension cost is the long-term interest rate (settlement rate) applied to the projected benefit obligation at the beginning of the year. Since the projected benefit obligation is a present value, the increase, as measured above, represents the interest cost incurred due to the passage of time.

54. (b) The discount rate applied to the projected benefit obligation is a long-term settlement rate (Pension Benefit Guarantee Corp. settlement rate, for instance).

55. (d) Prior service costs are amortized over current (20X8) and future years.

56. (a) ASC 405 requires that both the assumed health care trend rate and the accumulated post-retirement benefit obligation be disclosed.

57. (b) ASC 405 states that the attribution period begins when an employee is hired and ends when the employee is eligible to receive full benefits. Fletcher began work at age 48 and after 10 years of service, age 58, will be eligible for full benefits.

58. (a) ASC 405 “requires that an employer’s obligation for postretirement benefits expected to be provided to or for an employee be fully accrued by the date that employee attains full eligibility for all benefits, even if the employee is expected to render additional service beyond that date.”

59. (a) Service cost  $80,000  
       Interest on Jan 1 APBO  
           8% x $400,000  32,000  
       Actual Return  27,000  
           + unrecognized loss 2,000  
       Expected return on plan assets (29,000)  
       Postretirement benefits expense  $83,000
60. (b) The corridor is the larger of the two following calculations:

\[
\begin{align*}
1 - \text{10\%} \times \text{Accumulated postretirement benefit obligations} & = 40,000 \\
2 - \text{10\%} \times \text{Market related value of plan assets} & = 35,000 \\
\end{align*}
\]

Since $40,000 is the larger of the two numbers, it should be the corridor.

61. (a) An amortization table for a lease with a bargain purchase option should have a balance equal to the bargain purchase option at the end of the lease period. The lessee then debits the lease liability and credits cash to exercise the purchase option.

62. (b) The machinery qualifies as a capital lease because the lease term of 5 years divided by the 6 years of useful life equal 83-1/3\%, which exceeds the 75\% minimum. Any asset that qualifies as a capital lease under the 75\% rule or the 90\% FMV rule is returned to the lessor at the end of the lease term. Therefore, the depreciable life must be the lease term of 5 years. If the asset qualifies as a capital lease under the transfer title or bargain purchase option, the asset is transferred to the lessee at the end of the lease term and depreciable life is the useful life of the asset.

63. (c) The lease is a capitalizable lease from the lessee’s (Crane) point of view because the lease qualifies as a capital lease by meeting the 75\% or more useful life criterion. The lease term of 15 years divided by the 17 year useful life is actually 88.2\%. The lease also qualifies as a capital lease because the present value of the minimum lease payments exceeds 90\% of the fair value of the machine. The lease would not qualify as a capital lease from the lessor’s (Frank Leasing) point of view because of the unpredictability associated with collection of the lease payments.

64. (c) Key Point: Prior service cost is amortized over the average remaining life of the employees. The calculation of the average remaining service life of the employees is to add the remaining service lives of A (3 years); B (5 years); C (5 years); and D (7 years) for a total of 20 years and divide by the number of employees (20 years / 4 employees = 5 years). Therefore, the amortization of the prior service cost is $100,000 divided by 5 years or $20,000.

65. (a) Pension Expense for 1995

<table>
<thead>
<tr>
<th>Service and Interest Cost</th>
<th>$720,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less expected return on plan assets: 10% x 400,000</td>
<td>(40,000)</td>
</tr>
<tr>
<td>Pension Expense</td>
<td>$680,000</td>
</tr>
<tr>
<td>Less amount funded</td>
<td>(400,000)</td>
</tr>
<tr>
<td>Accrued Pension Liability</td>
<td>$280,000</td>
</tr>
</tbody>
</table>

66. (a) An amortization table for a lease with a bargain purchase option should have a balance equal to the bargain purchase option at the end of the lease period. The lessee then debits the lease liability and credits cash to exercise the purchase option.

67. (d) The estimates of future contributions are not part of the disclosures for defined-benefit plans required by ASC 405.
68. (b) The machinery qualifies as a capital lease because the lease term of 5 years divided by the 6 years of useful life equals 83.3%, which exceeds the 75% minimum. Any asset that qualifies as a capital lease under the 75% rule or the 90% FMV rule is returned to the lessor at the end of the lease term. Therefore, the depreciable life must be the lease term of 5 years. If the asset qualifies as a capital lease under the transfer title or bargain purchase option, the asset is transferred to the lessee at the end of the lease term and depreciable life is the useful life of the asset.

69. (c) The lease is a capitalizable lease from the lessee’s (Crane) point of view because the lease qualifies as a capital lease by meeting the 75% or more of useful life criterion. The lease term of 15 years divided by the 17 year useful life is actually 88.2%. The lease also qualifies as a capital lease because the present value of the minimum lease payments exceeds 90% of the fair value of the machine. The lease would not qualify as a capital lease from the lessor’s (Frank Leasing) point of view because of the unpredictability associated with collection of the lease payments.

70. (c) Since the first payment is on the 1st day of the lease, the transaction is an annuity due. Therefore, the lease should be capitalized at the future value of the lease payments. Annual payments of $500,000 x the present value of an annuity due for seven years at 5.35 for a total capitalized amount of $2,675,000.

71. (d) An employee’s obligation for post-retirement health benefit that are expected to be fully provided to or for an employee must be fully accrued by the date the employee is fully eligible for benefits. Since many employees retire or leave the company at this point, this conservative approach insures that the cost of the postretirement health benefits are charged (matched) to the periods that the employee is generating revenue for the company.

72. (a) At least one of the following criteria must be met to be considered a capitalized lease:

1. The lease contains a bargain purchase which is the answer to this question.
2. The lease transfers ownership of the property to the lessee at the end of the term. Answer B is incorrect because it states that the property is not transferred.
3. The lease term is 75% or more of the economic life of the property. Answer C is incorrect because it uses 65%.
4. The present value of the minimum lease payments is 90% or more of the fair value of the property. Answer D is wrong because it was 70%.

73. (c) I. Key: Calculate the present value of future lease payments:

<table>
<thead>
<tr>
<th>Annual Payment</th>
<th>Present value Factor</th>
<th>Total Present value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$60,000</td>
<td>X 5.0757</td>
<td>$304,542</td>
</tr>
</tbody>
</table>

II. Calculate Interest Expense

<table>
<thead>
<tr>
<th>Interest Expense</th>
<th>Effective Interest Rate</th>
<th>Beginning of the period X carrying value of the lease</th>
</tr>
</thead>
<tbody>
<tr>
<td>$15,227</td>
<td>5%</td>
<td>$304,542</td>
</tr>
</tbody>
</table>

74. (b) A characteristic of a capital lease is a bargain-purchase option. A is incorrect because the lease term is 75% or more not substantially less than the economic life. C is wrong because the present value is 90% not 75% of the fair value. D is incorrect because the lease obligation is reported as a liability on the balance sheet.
75. (c) Under the IFRS the lease qualifies as a finance lease because of the bargain purchase option and the majority of economic life of the asset use (5 out of 6 years).

76. (a) Under IFRS if the title to the land is not transferred to the lessee at the end of the lease term, the land is a finance lease.

77. (d) The projected-unit-credit method is used by the IFRS.

78. (c) In a defined contribution plan, the amount contributed to the plan ($70,000) is the pension expense.

79. (a) IFRS allows for the recognition of the total of 480,000 for the current year.

80. (d) The prior service cost of $200,000 is amortized over the remaining service lives of its employees of 10 years. So the answer is $200,000/10 years equals $20,000.

81. (d) IFRS allows the company to recognize the vested portion ($500,000) immediately and amortize the $300,000 over the remaining service lives of its employees ($300,000/10 years = $30,000). Therefore, the total prior service cost recognized is $530,000 ($500,000 plus $30,000).
Chapter Fourteen
Solutions to Accounting for Leases, Pension and Postretirement Plans Problems

NUMBER 1

a.1.

_Crystal Company_

**COMPUTATION OF EXPENSE ON OPERATING LEASE**

_For the Year Ended December 31, 1999_

Rental expense ($115,000 × 6 months) $690,000

**a.2.**

_Jackson Company_

**COMPUTATION OF INCOME BEFORE INCOME TAXES ON OPERATING LEASE**

_For the Year Ended December 31, 1999_

Rental income ($115,000 × 6 months) $690,000
Depreciation ($7,000,000 ÷ 8 years × 6 months) 437,500

$252,500

b.1.

_Truman Company_

**COMPUTATION OF EXPENSE ON LEASE RECORDED AS A PURCHASE**

_For the Year Ended December 31, 1999_

Depreciation ($3,520,800 [Schedule 1] ÷ 8) $440,100
Interest expense (Schedule 2) 73,020

$513,120

_Schedule 1—Computation of Purchase Price of Equipment_

Equal annual payment $600,000
Present value of an annuity of $1 in advance for 8 periods at 10% × 5.868

$3,520,800

_Schedule 2—Computation of Interest Expense_

Purchase price of equipment $3,520,800
Payment made on October 1, 1999 600,000

2,920,800

Interest rate 10%
Interest expense (October 1, 1999 to October 1, 2000) 292,080
Interest expense applicable to 1999 (3 months) 25%

$73,020
b.2.

Roosevelt Company

COMPUTATION OF INCOME BEFORE INCOME TAXES
ON LEASE RECORDED AS A SALE
For the Year Ended December 31, 1999

Profit on sale:
   Sales price *(Schedule 1)* $3,520,800
   Cost of equipment 3,000,000
   Interest income *(Schedule 2)* 73,020

$ 593,820

NUMBER 2

<table>
<thead>
<tr>
<th>Debits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. January 2, 1999—</td>
<td></td>
</tr>
<tr>
<td>to record lease:</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>850,000</td>
</tr>
<tr>
<td>Capital lease liability</td>
<td>850,000</td>
</tr>
<tr>
<td>2. December 31, 1999—</td>
<td></td>
</tr>
<tr>
<td>to record payment:</td>
<td></td>
</tr>
<tr>
<td>Capital lease liability</td>
<td>100,000</td>
</tr>
<tr>
<td>Cash</td>
<td>100,000</td>
</tr>
<tr>
<td>3. December 31, 1999—</td>
<td></td>
</tr>
<tr>
<td>to record depreciation:</td>
<td></td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>34,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>34,000</td>
</tr>
<tr>
<td>Interest expense</td>
<td>85,000</td>
</tr>
<tr>
<td>Capital lease liability</td>
<td>85,000</td>
</tr>
</tbody>
</table>
NUMBER 3

a. An example of postemployment benefits offered by employers is continuation of health care benefits. Deck is required to accrue liabilities for compensated absences and postemployment benefits if all of the following conditions are met:

- The obligation is attributable to employees' services already rendered,
- The employees' rights accumulate or vest,
- Payment is probable, and
- The amount of the benefits can be reasonably estimated.

If an obligation cannot be accrued solely because the amount cannot be reasonably estimated, the financial statements should disclose that fact.

b. Estimated amounts to be paid under a deferred compensation contract should be accrued over the period of an employee's active employment from the time the contract is signed to the employee's full eligibility date. The theoretical rationale for accrual of these obligations to be paid in the future is that accrual matches the cost of the benefits to the period in which services are rendered, and results in recognition of a measurable liability.

c. Deck Co.

Schedule of Deferred Compensation Amounts
For the Years 1995 through 1998

<table>
<thead>
<tr>
<th>For the year ended</th>
<th>Accrued liability</th>
<th>Deferred compensation expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/95</td>
<td>$  50,000</td>
<td>$50,000 [a]</td>
</tr>
<tr>
<td>12/31/96</td>
<td>$100,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>12/31/97</td>
<td>$150,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>12/31/98</td>
<td>$165,000</td>
<td>$15,000 [b]</td>
</tr>
</tbody>
</table>

\[a\] $150,000 / 3 (straight-line method)

\[b\] $150,000 x 10\%
NUMBER 4

a. The theoretical basis for capitalizing certain long-term leases is that the economic effect or substance of such leases on the lessee is that of an installment purchase. Such a lease transfers substantially all the risks and benefits incident to the ownership of property to the lessee, and obligates the lessee in a manner similar to that created when funds are borrowed.

b. 

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>864,000</td>
</tr>
<tr>
<td>Deferred gain</td>
<td>324,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>540,000</td>
</tr>
<tr>
<td>Leased equipment</td>
<td>864,000</td>
</tr>
<tr>
<td>Capital lease obligation</td>
<td>864,000</td>
</tr>
</tbody>
</table>

c. 

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest expense</td>
<td>86,400 [1]</td>
</tr>
<tr>
<td>Capital lease obligation</td>
<td>63,600</td>
</tr>
<tr>
<td>Executory cost</td>
<td>3,000</td>
</tr>
<tr>
<td>Cash</td>
<td>153,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>96,000 [2]</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>96,000</td>
</tr>
<tr>
<td>Deferred gain</td>
<td>36,000 [3]</td>
</tr>
<tr>
<td>Depreciation</td>
<td>36,000</td>
</tr>
</tbody>
</table>

[1] $864,000 \times 10\%$ implicit interest rate
[2] $864,000 \div 9$ year lease period
[3] $324,000 \div 9$ year lease period
Chapter 14 Simulation Exercise

NUMBER 1

Section A consists of 10 items. Select the best answer for each item. Answer all items.

The following information pertains to Sparta Co.’s defined benefit pension plan.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount rate</td>
<td>8%</td>
</tr>
<tr>
<td>Expected rate of return</td>
<td>10%</td>
</tr>
<tr>
<td>Average service life</td>
<td>12 years</td>
</tr>
</tbody>
</table>

At January 1, 1999:

- Projected benefit obligation: $600,000
- Fair value of pension plan assets: $720,000
- Unrecognized prior service cost: $240,000
- Unamortized prior pension gain: $96,000

At December 31, 1999:

- Projected benefit obligation: $910,000
- Fair value of pension plan assets: $825,000

Service cost for 1999 was $90,000. There were no contributions made or benefits paid during the year. Sparta’s unfunded accrued pension liability was $8,000 at January 1, 1999. Sparta uses the straight-line method of amortization over the maximum period permitted.

Required:

1. For Items (a) through (e), calculate the amounts to be recognized as components of Sparta’s unfunded accrued pension liability at December 31, 1999.

   **Amounts to be calculated:**
   (a) Interest cost.
   (b) Expected return on plan assets.
   (c) Actual return on plan assets.
   (d) Amortization of prior service costs.
   (e) Minimum amortization of unrecognized pension gain.

2. For items (f) through (j), determine whether the component increases (I) or decreases (D) Sparta’s unfunded accrued pension liability.

   **Items to be answered:**
   (f) Service cost.
   (g) Deferral of gain on pension plan assets.
   (h) Actual return on plan assets.
   (i) Amortization of prior service costs.
   (j) Amortization of unrecognized pension gain.
Section B
Wyatt, CPA, is meeting with Brown, the controller of Emco, a wholesaler, to discuss the following accounting issue:

Brown is aware that ASC 405, *Employers’ Accounting for Postretirement Benefits Other Than Pensions*, is effective for years beginning after December 15, 1999. Brown is uncertain about the benefits and beneficiaries covered by this Statement. Brown believes that, regardless of ASC 405, no estimate of postretirement obligation can be reasonable because it would be based on too many assumptions. For this reason, Brown wishes to continue to account for the postretirement benefits that Emco pays to its retirees on the pay-as-you-go (cash) basis.

Brown has asked Wyatt to write a brief memo to Brown that Brown can use to explain this issue to Emco’s president.

**Required:**
Write a brief advisory memo from Wyatt to Brown to:

State the principal benefit covered by ASC 405 and give an example of other benefits covered by FAS 106. Explain the reasoning given in ASC 405 for requiring accruals based on estimates. Indicate the primary recipients of postretirement benefits other than pensions.

**NUMBER 2**
**LEASES**

On January 1, 2004, the GA Company (as lessor) entered into a non-cancelable lease agreement with XYZ Company (lessee) for the lease of a diesel-electric locomotive engine. GA’s normal selling price is $690,750 and its cost to manufacture the engine is $500,000. The lease agreement provides for six annual payments of $150,000 each and the first payment starts on January 1, 2004.

XYZ’s incremental borrowing rate is 12% and the implicit interest rate used by GA is also 12%. The lease term is six years and the useful life of the engine is six years. At the end of the lease period, the title to the engine is transferred to XYZ. Collectibility of the rentals is reasonably predictable, and there are no important uncertainties surrounding the cost yet to be incurred by the lessor.

**Required:**
(a) From the lessee’s viewpoint, what kind of lease is the above agreement? Why?
(b) From the lessor’s viewpoint, what kind of lease is the above agreement? Why?
(c) Using a worksheet, prepare a lease amortization schedule from the lessor’s point of view for the first three years.
(d) Prepare all the journal entries* that should be recorded by the XYZ Company for the first year.
(e) Prepare all the journal entries that should be recorded by the GA Company for the first year.
(f) From the lessee’s point of view, what expenses and the amounts of the expenses should appear on XYZ’s 2004 Income Statement? What accounts and the classification of the accounts should appear on the Balance Sheet at December 31, 2004?
(g) From the lessor’s point of view, what accounts and the amount of the accounts should appear on GA’s 2004 Income Statement? What accounts, the amounts of the accounts and the classification should appear on the December 31, 2004 Balance Sheet?

*On the CBT, the information will be entered in a spreadsheet-based format.
Chapter 14 Simulation Solution

NUMBER 1

Section A:

1. 

(a) $48,000. Interest cost is the discount rate times the January 1 projected benefit obligation: 8% × $600,000 = $48,000 interest cost.

(b) $72,000. The expected return on plan assets is the expected rate of return times the January 1 fair value of pension plan assets: 10% × $720,000 = $72,000 expected return on plan assets.

(c) $105,000. The problem states that there were not any contributions made or benefits paid during the year. Therefore, the actual return on plan assets is the change in the fair value of the plan assets from January 1 to December 31 of the current year: ($720,000 vs. $825,000 = $105,000 actual return on plan assets).

(d) $20,000. The amortization of the prior service cost is the January 1 unamortized prior service cost divided by the average remaining service life of the employees: $240,000 ÷ 12 years = $20,000 amortization of prior service cost.

(e) $2,000. The minimum amortization of unrecognized prior pension gain is calculated by using the “corridor” approach. The corridor approach involves four steps:

Step #1: Determine the larger of the January 1 projected benefit obligation ($600,000) and the fair value of the plan assets ($720,000). The larger is $720,000.

Step #2: Multiply the $720,000 by 10% to establish the corridor. The corridor is $72,000. If Sparta’s unrecognized prior pension gain had been less than $72,000, the company would not record any amortization.

Step #3: The amount to be amortized is the excess of the unamortized prior pension gain over the corridor amount: $96,000 – $72,000 = $24,000 amount to be amortized.

Step #4: The minimum amortization is the $24,000 from Step #3 divided by the average service life of employees. In this case $24,000 ÷ 12 years = $2,000 minimum amortization of unrecognized pension gain.

2. 

(f) (I) Service cost increases pension expense and accrued pension liability.

(g) (I) The deferral of a gain on pension plan assets will increase pension expense and accrued pension liability. For example, in an earlier part of this problem the actual return on plan assets was $105,000 and the expected return was $72,000. This would be included in the calculation of pension expense and the accrued pension liability as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service cost</td>
<td>$90,000</td>
</tr>
<tr>
<td>Interest on PBO</td>
<td>48,000</td>
</tr>
<tr>
<td>Actual return on plan assets</td>
<td>$105,000</td>
</tr>
<tr>
<td>Less deferred gain</td>
<td>(33,000)</td>
</tr>
<tr>
<td>Expected return</td>
<td>(72,000)</td>
</tr>
<tr>
<td>Amortization of prior service cost</td>
<td>20,000</td>
</tr>
<tr>
<td>Amortization of prior pension gain</td>
<td>(2,000)</td>
</tr>
<tr>
<td>Total pension expense—1999</td>
<td>$84,000</td>
</tr>
</tbody>
</table>

If the actual return on plan assets had been deducted, the pension expense would have decreased by $105,000, but because of the deferred gain, the deduction is only $72,000. The effect of the deferred gain is to reduce the deduction from pension expense by $33,000 and therefore increase pension expense and the accrued pension liability.

Note: The expected return on plan assets is used in calculating pension cost for the year, not the actual return. This is done to record a more consistent return rather than the more erratic return based on actual results.
(h) (D) The actual return as shown in the above calculation is adjusted by the deferred gain and deducted from pension expense and the accrued pension liability.

(i) (I) Amortization of prior service cost as shown in the above calculation increases pension expense and accrued pension liability.

(j) (D) The amortization of the unrecognized pension gain as shown above is a deduction from pension expense and the accrued pension liability.

Section B:

ASC 405, Employers' Accounting for Postretirement Benefits Other Than Pensions.

The primary recipients of postretirement benefits other than pensions are retired employees, their beneficiaries, and covered dependents. The principle benefit covered by ASC 405 is postretirement health care benefits. Examples of other benefits include tuition assistance, legal services, life insurance benefits, day care, and housing subsidies.

The reasoning given in ASC 405 is that accrual of the obligation based on best estimates is superior to implying, by a failure to accrue, that no obligation exists prior to the payment of benefits.

NUMBER 2

LEASES

(a) From the lessee’s point of view, the lease is a capitalizable lease because the title to the engine is transferred to the lessee at the end of the lease term. The lease also qualifies as a capitalizable lease using the 75% useful life rule because the lease term is 100% of the useful life.

(b) From the lessor’s point of view, the lease is a sale-type lease because the GA Company manufactured the engine. It is a capitalized lease because the title to the engine is transferred to lessee at the end of the lease term and the lease term is 100% of the useful life of the engine. In addition, the collectibility of the lease payments is reasonably predictable and there are no important uncertainties surrounding the cost yet to be incurred by the lessor.

(c) Worksheet Solution

<table>
<thead>
<tr>
<th>Date</th>
<th>Lease Receivable</th>
<th>Unearned Interest</th>
<th>Carrying Value</th>
<th>Interest Rate</th>
<th>Effective Interest</th>
<th>Carrying Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/2004</td>
<td>$900,000</td>
<td>$209,250</td>
<td>$690,750</td>
<td>12%</td>
<td>$64,890</td>
<td>690,750</td>
</tr>
<tr>
<td>1/1/04</td>
<td>(150,000)</td>
<td></td>
<td>$150,000</td>
<td></td>
<td></td>
<td>150,000</td>
</tr>
<tr>
<td>1/1/04 Adj. Bal</td>
<td>750,000</td>
<td>209,250</td>
<td>540,750</td>
<td></td>
<td></td>
<td>540,750</td>
</tr>
<tr>
<td>Interest-2004</td>
<td></td>
<td>64,890</td>
<td>64,890</td>
<td>12%</td>
<td>$64,890</td>
<td>64,890</td>
</tr>
<tr>
<td>12/31/04</td>
<td>750,000</td>
<td>144,360</td>
<td>605,640</td>
<td></td>
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<td>605,640</td>
</tr>
<tr>
<td>1/1 Payment</td>
<td>(150,000)</td>
<td></td>
<td>(150,000)</td>
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<td>(150,000)</td>
</tr>
<tr>
<td>1/1/05 Adj. Bal</td>
<td>600,000</td>
<td>144,360</td>
<td>455,640</td>
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<td></td>
<td>455,640</td>
</tr>
<tr>
<td>Interest 2005</td>
<td></td>
<td>(64,890)</td>
<td>(54,677)</td>
<td></td>
<td>54,677</td>
<td>54,677</td>
</tr>
<tr>
<td>12/31/05</td>
<td>600,000</td>
<td>89,683</td>
<td>510,317</td>
<td></td>
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<td>510,317</td>
</tr>
<tr>
<td>1/1 Payment</td>
<td>(150,000)</td>
<td></td>
<td>(150,000)</td>
<td></td>
<td></td>
<td>(150,000)</td>
</tr>
<tr>
<td>1/1/06 Adj Bal</td>
<td>450,000</td>
<td>89,683</td>
<td>360,317</td>
<td></td>
<td></td>
<td>360,317</td>
</tr>
<tr>
<td>Interest 2006</td>
<td></td>
<td>(43,238)</td>
<td>(43,238)</td>
<td></td>
<td>43,238</td>
<td>43,238</td>
</tr>
<tr>
<td>12/31/06</td>
<td>450,000</td>
<td>46,445</td>
<td>403,555</td>
<td></td>
<td></td>
<td>403,555</td>
</tr>
</tbody>
</table>

Note: Interest Revenue = Effective Interest Rate X January 1 Adjusted Balance for Carrying Value

Year 2004 = 12% X $540,750 = $64,890

(d) Journal Entries for XYZ (Lessee) for 2004
2004
Jan 1 Leased Asset  690,750
   Lease Liability 690,750

Note: Since the lease term is the useful life of the asset, the present value of the future lease payments is equal to the sales price.

2004 Lease Liability 150,000
Jan 1 Cash 150,000

To record 2004 Lease Payment

2004 Depreciation Expense Leased Asset 115,125
Dec 31 Accumulated Depreciation 115,125

Cost of 690,750 divided by 6 years = 115,125

2004 Interest Expense 64,890
Dec 31 Interest Payable 64,890

12% x 540,750 = 64,890

2005 Interest Payable 64,890
Jan 1 Lease Liability 85,110
   Cash 150,000

(e) Journal Entries for GA Company (Lessor) for 2004

2004 Lease Receivable 900,000
Jan 1 Unearned Interest 209,250
   Sales 690,750

Lease Receivable is 6 payments x 150,000 = $900,000

Jan 1 Cost of Goods Sold 500,000
   Inventory 500,000

Jan 1 Cash 150,000
   Lease Receivable 150,000

To record the receipt of the 1st lease payment

Dec 31 Unearned Interest 64,890
   Interest Revenue 64,890

540,750 x 12% = 64,890
(f) Income Statement and Balance Sheet Accounts from the Lessee’s Point of View

Income Statement Accounts Shown in the Journal Entries:

- Depreciation Expense — $115,125
- Interest Expense — 64,890

Balance Accounts are a little more difficult to calculate: Post the 2004 Journal Entries to a “T” account and the account will increase by $690,750 and decrease by $150,000 for an ending balance of $540,750 total lease liability. The total lease liability should be split between the current and noncurrent portions. See the January 1, 2005 Journal Entry.

- Lease Liability – Current Portion  $ 85,110
- Lease Liability – Noncurrent  455,640
- Total Lease Liability  $540,750

(g) From the lessor’s point of view, the income statement accounts would be those listed in the journal entries.

Sales  $690,750
Cost of Sales  500,000
Gross Profit  190,750
Interest Revenue  $ 64,890

The Balance Sheet Accounts would be as follows:

- Lease Receivable – Current  $150,000
- Lease Receivable – Noncurrent  600,000
- Less Unearned Interest  (209,250)
- Net Carrying Value  $390,750
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Governmental Accounting

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Chapter Fifteen
Governmental Accounting

OVERVIEW
Governmental Accounting is the accounting for state and local governments. Its generally accepted accounting principles are established by the Governmental Accounting Standards Board (GASB) which is the public sector equivalent of the FASB. The Accounting procedures are established based on the perceived needs of the financial statement users as well as the underlying nature of the reporting units.

Primary Users of Governmental Financial Statements
GASB Concepts Statement #1 lists the following three groups as primary users of financial statements:

1. **Citizenry** – Want to evaluate the likelihood of tax or service fee increases, to forecast revenues in order to influence spending decisions, to ensure that resources were used in accordance with appropriations, to assess financial condition, and to compare budgeted to actual results.

2. **Legislative and oversite bodies** – Want to assess the overall financial condition when developing budgets and program recommendations, to monitor operating results to assure compliance with mandates, to determine the reasonableness of fees and the need for tax changes, and to ascertain the ability to finance new programs and financial needs.

3. **Investors and creditors** – Want to know the amount of available and likely future financial resources, to measure the debt position and the ability to service that debt, and to review operating results and cash flow data.

Goals of Governmental Reporting
- The goal of making the government accountable to the public is the one goal that has been constant over the years. This goal should assist users in making economic, social and political decisions.

- **Interperiod equity** is an important component of accountability that is fundamental to public administration (Balance Budget Concept).

Financial resources received by a government during a period should suffice to pay for the services provided during that period. Moreover, debt should be repaid during the probable period of usefulness of the assets acquired. Thus, financial reporting should help taxpayers assess whether future taxpayers will have to assume burdens for services already provided.

FOCUS
SGAS 34 introduced two new phrases describing the focus of governmental reporting:

- **Current Resources Management Focus**
  This concept is a focus on short-term results and is used in areas where the focus is on measuring current financial resources such as cash, investments and receivables and the current claims against them. These areas do not report buildings, equipment or long-term debt because they do not have a direct impact on current financial resources.

- **Economic Resources Management Focus**
  This concept provides an overall entity perspective and provides information about the long-term stewardship of governmental resources. This concept is used in areas that do not focus solely on current financial resources but report all the assets at the disposal of the government as well as the liabilities that must be paid.
FINANCIAL STATEMENTS

In its desire to provide information to satisfy the broad needs of its users, the GASB created two distinct sets of financial statements which it defined as follows:

- **Fund-based Financial Statements** have been designed “to show restrictions on the planned use of resources or to measure, in the short term, the revenues and expenditures arising from certain activities.”
- **Government-wide Financial Statements** will have a longer-term focus because they will report “all revenues and all costs of providing services each year, not just those received or paid in the current year or soon after year-end.”

Since the fund-based financial statements follow the traditional governmental funds, journal entries and accounts, the emphasis in the first part of this chapter will be on fund-based accounting and the adjustments and reporting for government-wide financial statements will be covered at the end of the chapter.

PRIMARY ACCOUNTING EMPHASIS OF FUND-BASED REPORTS

The primary accounting emphasis has traditionally been on reporting short-term results that was directed toward answering the following three basic questions:

- Where did the financial resources come from?
- Where did the financial resources go?
- What amount of financial resources is presently held?

FUND ACCOUNTING

One of the most unique aspects of governmental accounting is the use of fund accounting. Each fund is a separate accounting entity and all the funds taken together make up the government’s financial reporting system. The GASB defines a fund as an independent fiscal and accounting entity with a self-balancing set of accounts recording cash and other financial resources together with all related liabilities and residual equities or balances and changes therein which are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with special regulations, restrictions, or limitations.

Because the accounting for the police department, the school systems, the motor pool, trust funds, and the water system have such diverse objectives, the funds are divided into three categories:

- **Governmental Funds** which account for activities primarily designed to serve the public.
- **Proprietary Funds** which are business-type activities which are supported by user charge.
- **Fiduciary Funds** are activities in which the government accounts for monies it holds in a trustee capacity to benefit others. These funds cannot be used for government purposes.

TYPES OF FUNDS

- **Governmental Funds** account for activities primarily designed to serve the public and are generally financed through taxes. For example, governmental funds would account for activities of the fire and police departments.

  Governmental funds and fund-based reporting focus on short-term results (current resources management focus) and use modified accrual approach for the recognition of revenues and expenditures. These funds are often called “expendable” funds because of the focus on current resources such as cash, investments, and receivables and the current claims against them. The difference between the current assets and current liabilities is called fund balance. Because of its short-term focus, governmental funds do not account for non-current fixed assets or non-current debt.
There are five governmental funds:

1. **General Fund** – to account for all financial activities and resources not required to be accounted for in another fund. All accounts are “current”.

2. **Special Revenue Funds** – to account for the proceeds of specific revenue sources that are legally restricted to expenditures for specified purposes (roads, bridges). For example: A federal grant restricted for road repairs.

3. **Capital Projects Funds** – to account for financial resources to be used for the acquisition or construction of major capital facilities other than those financed by proprietary funds and trust funds.

4. **Debt Service Funds** – to account for the accumulation of resources for, and the payment of, general long-term debt principal and interest.

5. **The Permanent Funds** category is a new fund type within the governmental funds. It accounts for assets contributed to the government by an external donor with the stipulation that the principal cannot be spent but any income can be used **within the government**, often for a designated purpose. (These contributions were formerly reported in the non-expendable trust fund.) Permanent Funds are unusual in that the funds include long-term assets from the non-expendable portion of the external donations. Most governmental funds include only current assets and current liabilities.

The first three funds, the General Fund, Special Revenue Funds and the Capital Projects Funds are unique in that budgets are recorded in the fund and encumbrances are used for accruals. Budgets and encumbrances are not needed in the Debt Service Funds and Permanent Funds because their transactions are prescribed by contract or agreement.

- **Proprietary Funds** are business-type activities run by the government and supported by user charge. These funds have a long-term focus (economic resources focus) and use accrual accounting. Their accounting is similar to the accounting for a business and the equity section of these funds use terms such as contributed capital and retained earnings. There are two types of proprietary funds:
  1. **Enterprise Funds** are governmental operations that benefit the general public and are financed by user charges. Examples are the water and sewer systems, public golf courses, public swimming pools and an airport.
  2. **Internal Service Funds** – to account for the financing of goods or services provided by one department or agency to other departments or agencies of the government unit, or to other governmental units, on a cost-reimbursement basis. Examples are a centralized motor pool, engineering pool, and centralized data processing facility.

- **Fiduciary Funds** are assets that are held in a trustee capacity for external parties and the funds cannot be used to support the government’s own programs. Fiduciary Funds use the economic resources measurement focus and accrual accounting for the reporting of revenues and expenses. The fiduciary funds consist of three trust funds and the agency fund.
  1. **Investment Trust Funds** - This fund type accounts for the outside portion of investment pools where the reporting government has accepted funds from other governments to have more money to invest and, hopefully, earn a higher return.
  2. **Private-Purpose Trust Funds** – This fund type accounts for any monies held in a trustee capacity where principal and interest are for the benefit of external parties outside of the government such as individuals, private organizations, or other governments.
  3. **Pension Trust Fund Accounts** – This fund type accounts for employee retirement funds.
  4. **Agency Funds** – This fund type accounts for assets held on a purely custodial basis (assets equal liabilities) and thus do not involve measurement of results of operations. For example, the money withheld from employees’ paychecks for health insurance premiums would be recorded in an agency fund.
Review the overview of the types of funds on page 15-4 and the format of the financial statements of the general fund on page 15-5. Notice that the balance sheet includes only current assets and current liabilities. The other financing sources and uses shown on the statement of revenues, expenditures, and changes in fund balances will be discussed later.

**TYPES OF FUNDS**

Three major categories of funds used in accounting for governmental financial operations:

<table>
<thead>
<tr>
<th><strong>Governmental Funds</strong> (Expendable)</th>
<th><strong>Proprietary Funds</strong> (Non-expendable)</th>
<th><strong>Fiduciary Funds</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General Fund</td>
<td>1. Enterprise Fund</td>
<td>1. Trust Funds</td>
</tr>
<tr>
<td>2. Special Revenues</td>
<td>(Activities which benefit the population and are supported by user fees)</td>
<td>A. Investment trust funds</td>
</tr>
<tr>
<td>3. Capital Projects Fund</td>
<td></td>
<td>B. Private-purpose trust funds</td>
</tr>
<tr>
<td>4. Debt Service Fund</td>
<td>2. Internal Service</td>
<td></td>
</tr>
<tr>
<td>5. Permanent Funds</td>
<td>(Provides services of facilities to other departments within the government)</td>
<td>C. Pensions &amp; other employee benefit trust funds</td>
</tr>
</tbody>
</table>

### Characteristics of Fund for Fund-Based Report

<table>
<thead>
<tr>
<th><strong>Accounting</strong></th>
<th><strong>Accounting</strong></th>
<th><strong>Accounting</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. FOCUS: current resources management focus</td>
<td>A. FOCUS: economic resources management focus</td>
<td>A. FOCUS: economic resources management focus</td>
</tr>
<tr>
<td>B. All use Modified Accrual since they are expendable.</td>
<td>B. Accrual accounting</td>
<td>B. Accrual accounting</td>
</tr>
<tr>
<td>C. Records Budget - EXCEPT Debt Service &amp; Permanent Funds</td>
<td>C. Like a corporation</td>
<td></td>
</tr>
<tr>
<td>D. Encumbrance System – Funds are committed (earmarked) EXCEPT Debt Service &amp; Permanent Funds</td>
<td>D. Equity includes RE and contributed capital</td>
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</tr>
<tr>
<td>E. No fixed assets exist.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. No long-term debt exists.</td>
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</tbody>
</table>
Example: Financial Statements of the General Fund

GUIL COUNTY
General Fund
Statement of Revenues, Expenditures, and Changes in Fund Balance (Condensed)
Year Ended June 30, Year 5

Revenues $600,000
Expenditures (533,000)
Excess of revenues over expenditures $ 67,000
Other financing sources (uses):
- Bond proceeds – Capital debt $200,000
- Operating transfers in 100,000
- Operating transfers out (200,000)
Total other financing sources (uses) 100,000
Excess of revenues and other financing sources over expenditures and other financing uses $167,000
Unreserved fund balance, July 1, Year 4 90,000
Less: Increase in reserve for encumbrances (20,000)
Unreserved fund balance, June 30, Year 5 $237,000

GUIL COUNTY
General Fund
Balance Sheet (Condensed)
June 30, Year 5

Assets
- Cash $ 61,900
- Investments 105,000
- Tax receivables (net of allowances) 227,850
- Supplies inventory 5,000
- Due from other funds 26,000
Total assets $425,750

Liabilities
- Vouchers payable $125,930
- Contracts payable 16,720
- Due to other funds 26,100
Total liabilities $168,750

Equity
Fund balances:
- Reserved for encumbrances $ 15,000
- Reserve for supplies inventory 5,000
- Unreserved, undesignated 237,000
Total fund balances 257,000
Total liabilities and equity $425,750
MODIFIED ACCRUAL BASIS (Part Cash and Part Accrual)

Modified accrual is used by the five governmental funds.

Revenues

Revenues are recognized by the expendable funds when they are both "measurable and available."

Examples:
1. Property tax revenues are recognized on the accrual basis when the taxes are levied, assuming that all taxes are collected during the year or within 60 days from the end of the year. Any taxes expected to be collected after the 60-day period would be considered deferred revenue in the current period and revenue in the following period.

2. Income taxes and sales taxes are recognized when they become susceptible to accrual.

3. Miscellaneous revenues such as parking fees, traffic court fines, building permits and business licenses are recognized on a cash basis.

Expenditures

Expenditures are generally recognized on the accrual basis. The exceptions are interest and long-term debt. Interest and long-term debt payments are not accrued but are recognized when due.

Inventory of supplies and prepaid insurance may be recognized on either the cash basis (purchase method) or the accrual basis (consumption method).

SUMMARY OF MODIFIED ACCRUAL CONCEPTS

<table>
<thead>
<tr>
<th>Revenues/Expenditures</th>
<th>Accounting Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues (Concept)</td>
<td>Recognize when available and measurable</td>
</tr>
<tr>
<td>Property Tax Revenues</td>
<td>Usually accrual</td>
</tr>
<tr>
<td>Income Taxes and Sales Taxes Revenues</td>
<td>Recognize when susceptible to accrual</td>
</tr>
<tr>
<td>Miscellaneous Revenues (parking fees, traffic court fines, building permits, and business license)</td>
<td>Recognize when cash is received</td>
</tr>
<tr>
<td>Expenditures in General</td>
<td>Accrual basis</td>
</tr>
<tr>
<td>Interest and payments on long-term debt</td>
<td>Recognize when due</td>
</tr>
<tr>
<td>Expenditures for Supplies Inventory or Prepaid Insurance</td>
<td>Accrual (Consumption Method)</td>
</tr>
<tr>
<td></td>
<td>Cash (Purchase Method)</td>
</tr>
</tbody>
</table>

Note: Most problems on the CPA Exam contain a standard group of questions that appear in every problem. Study carefully the next seven groups of journal entries on governmental funds to become familiar with these typical areas.
Governmental Funds

GENERAL FUND – FUND BASED REPORTING

The General Fund accounts for all revenues and expenditures of a governmental unit which are not accounted for in other funds. It is usually the primary and most important fund for state and local governments, and it is used to account for most routine operations. Revenue received should be classified by source. The primary sources are taxes, fines, and licenses. All other resources that are not accounted for in other governmental funds are included in the general fund.

Typical Journal Entries of the General Fund:

1. To record the budget for the year (Budgets are recorded by the general, special revenue, and capital projects).

   Budgetary accounts are a part of the double entry accounting system in fund accounting where appropriations and estimated revenues are subject to approval by a legislative body. This is necessary because of the need to control expenditures and to levy taxes sufficient to cover estimated expenditures.

   At the beginning of the year

   Estimated Revenue Control $400,000
   Appropriations Control $398,000
   Budgetary Fund Balance 2,000

2. To record the property tax levy.

   Property Tax Receivable – Current $280,000
   Allowance for uncollectible Taxes – Current $ 20,000
   Revenues Control 260,000

   Notice that the revenues control is credited for the expected collections. Governmental funds do not use a bad debt expenditure account because it does not have any budgetary implications.

3. Revenues from fines, licenses, and permits amount to $30,000.

   Cash $ 30,000
   Revenues Control $ 30,000

   Note that miscellaneous revenues are recognized on a cash basis.

4. Received a letter from the state indicating the city's share of sales taxes amounted to $25,000.

   State Sales Tax Receivable $ 25,000
   Revenue Control $ 25,000

   Based on the letter from the state, the sales tax revenue is susceptible to accrual.
5. **Encumbrances.** Encumbrances are recorded obligations for unperformed contracts for goods or services. Because authorizations to spend are limited to appropriations, it is necessary to demonstrate compliance with legal requirements. This is done to prevent overspending of appropriations. For example, equipment is ordered with delivery expected in 60 days, at an estimated cost of $6,000 on July 1, Year 5.

    July 1, Year 5       To Record the Encumbrance
    Encumbrances Control $6,000
    Budgetary Fund Balance
    Reserve for Encumbrances $6,000

August 30, Year 5    Equipment is received costing $6,200. The encumbrances entry is reversed.
    Budgetary Fund Balance
    Reserve for Encumbrances $6,000
    Encumbrances Control $6,000

August 30, Year 5    The actual expenditure is recorded.
    Expenditures Control $6,200
    Vouchers Payable $6,200

6. **Expenditures for Supplies Inventory and Prepaid Insurance**

Accounting for supplies inventory or prepaid insurance may be done using either the consumption method (accrual) or the purchase method (cash basis).

**THE KEY POINT IS THAT UNDER THE CONSUMPTION METHOD THE AMOUNT CHARGED TO EXPENDITURES IS THE AMOUNT CONSUMED AND THE AMOUNT CHARGED TO EXPENDITURES UNDER THE PURCHASE METHOD IS THE AMOUNT PURCHASED.**

The following example compares the accounting for supplies inventory under both methods.

**Comparison of Accounting for Supplies Inventory — Purchase versus Consumption Method**

<table>
<thead>
<tr>
<th>Item</th>
<th>Purchase Method of Accounting</th>
<th>Consumption Method of Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>November 1, Year 5:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Record acquisition of $2,000 of inventory</td>
<td>Expenditures 2,000 Vouchers Payable 2,000</td>
<td>Expenditures 2,000 Vouchers Payable 2,000</td>
</tr>
<tr>
<td><strong>December 31, Year 5:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognize ending inventory of 600</td>
<td>Inventory of Supplies 600 Fund Balance Reserved for Inventories 600</td>
<td>Inventory of Supplies 600 Expenditures 600</td>
</tr>
<tr>
<td>Unreserved Fund Balance 600</td>
<td>Unreserved Fund Balance 600 Fund Balance Reserved for Inventories 600</td>
<td></td>
</tr>
<tr>
<td><strong>December 31, Year 6:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Record use of remaining inventory in Year 6</td>
<td>Fund Balance Reserved for Inventories 600 Inventory of Supplies 600</td>
<td>Expenditures 600 Inventories of Supplies 600</td>
</tr>
<tr>
<td>Unreserved Fund Balance 600</td>
<td>Unreserved Fund Balance 600 Fund Balance Reserved for Inventories 600</td>
<td></td>
</tr>
</tbody>
</table>
7. **Interfund transactions** are used within most government units as a means of directing sufficient resources to all activities and functions; monetary transfers made from the General Fund are quite prevalent since many government revenues are originally accumulated in this fund.

A. **Operating transfers** are often made to provide financing for the broad range of government activities.

- The asset *outflow* is recorded as an *other financing use* by the fund making the transfer while the receipt is labeled as an *other financing source*.

- The other financing sources and the other financing uses accounts are reported as a part of the Statement of Revenues and Expenditures.

*For example:*
The general fund transfers $20,000 of operating funds to subsidize the swimming pool enterprise fund.

| Other Financing Uses – operating transfers out | $20,000 |
| Cash | $20,000 |

B. **Equity transfers** are nonrecurring or nonroutine transfers of equity between funds.

- They are made to create permanent financing for an Enterprise Fund or an Internal Service Fund.

- The *transfer-out* is recorded as Other Financing Uses - operating transfers out while the *transfer-in* is shown as contributed capital.

*For example:*
The general fund transfers $80,000 to an internal service fund to establish a centralized motor pool.

| Other Financing Uses – operating transfers out | $80,000 |
| Cash | 80,000 |

NOTE: The Internal Service Fund would debit cash and credit contributed capital.

C. **Quasi-external transactions** are payments for work done within the government and are recorded as normal revenues and expenditures.

*For example:*
The city-owned water utility bills the general fund for water used in the city hall.

| Expenditures Control | $5,000 |
| Cash | 5,000 |
Illustrative Problem and Year-end reclassification and closing entries.

General Fund Transactions for the fiscal year ending June 30, Year 5:

1. A budget was approved for FY Year 5 showing estimated revenue of $1,896,000 and appropriations of $1,875,000 including estimated other financing uses of $20,000. The revenue estimate includes a real estate tax levy of $1,805,000 after allowing for estimated uncollectible taxes of 5%.

2. Supplies totaling $8,000 and two fire trucks costing $22,000 each were ordered.

3. An advance of $30,000 was made to establish an internal service fund (ISF) to acquire and maintain city owned vehicles. The $30,000 is expected to be repaid.

4. An annual payment of $20,000 was made to provide for redemption of serial bonds which begin to mature in ten years.

5. Wages of city departments totaled $678,000 during the year of which $11,200 was unpaid at June 30, Year 5. Included in wages was $62,000 in payments to the city pension fund which have not been paid.

6. The supplies inventory is $2,000 at year-end. It is the city's policy to show the supplies inventory in the balance sheet, but a city ordinance requires all supplies purchased to be charged to expenditures.

7. A total of $1,121,000 was transferred to the general fund of the town's school district which fund is operated independently of the city's general fund.

8. The supplies and one fire truck arrived costing $7,800 and $21,650 respectively. The other fire truck will be received in July.

9. Vouchers for the supplies and fire equipment were approved and paid.

10. Taxes previously written off in the amount of $850 were collected.

11. Miscellaneous tax receipts totaled $94,500. Real estate taxes of $1,802,000 were collected.

REQUIRED:

a. Journal entries for FY Year 5 transactions.

b. Year-end reclassification and closing entries.

Solution to Illustrative Problem:

1. Estimated Revenues Control $1,896,000
   Appropriations Control $1,855,000
   Estimated Other Financing
   Uses Control – Operating Transfers Out 20,000
   Budgetary Fund Balance 21,000
   Taxes Receivable—Current $1,900,000
   Estimated Uncollectible Taxes $95,000
   Revenue Control 1,805,000
   $1,805,000 + .05 X = X
   X = $1,900,000

2. Encumbrances Control $52,000
   Budgetary Fund Balance
   Reserve for Encumbrances $52,000
3. Due from Internal Service Fund $30,000
   Cash $30,000

4. Other Financing – Operating Transfers Out $20,000
   Cash $20,000

This transaction will result in entries in the Debt Service Fund.

5. Expenditures Control—Wages $678,000
   Wages Payable $11,200
   Due Trust Fund—Pensions 62,000
   Cash 604,800

The Trust Fund for city pensions is affected by this entry.

6. Inventory of Supplies $2,000
   Fund Balance Reserved for inventory of supplies $2,000

7. Expenditures Control—Schools $1,121,000
   Cash $1,121,000

8. Budgetary Fund Balance
   Reserve for Encumbrances $30,000
   Encumbrances Control $30,000

Encumbrances for $8,000 in supplies and $22,000 for one fire truck are reversed. A $22,000 encumbrance remains open.

   Expenditures Control $29,450
   Vouchers Payable $29,450
   ($7,800 supplies; $21,650 fire truck)

9. Vouchers Payable $29,450
   Cash $29,450

10. Cash $850
    Revenue Control $850

11. Cash $94,500
    Revenue Control $94,500
    Cash $1,802,000
    Taxes Receivable—Current $1,802,000

Closing Entries

12. Step One: Close the budgetary accounts.

   Budgetary Fund Balance $21,000
   Estimated Other Financing Uses – Operating Transfers Out 20,000
   Appropriations Control 1,855,000
   Estimated Revenues Control 1,896,000
13. Step Two: Close Revenue, Expenditures, and Other Financing accounts to Unreserved Fund Balance.

<table>
<thead>
<tr>
<th>Revenue Control</th>
<th>$1,900,350</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure Control</td>
<td>$1,828,450</td>
</tr>
<tr>
<td>Other Financing Uses Control</td>
<td>20,000</td>
</tr>
<tr>
<td>Unreserved Fund Balance</td>
<td>51,900</td>
</tr>
</tbody>
</table>

14. Step Three: Close Encumbrance Accounts

<table>
<thead>
<tr>
<th>Budgetary Fund Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve for Encumbrances</td>
</tr>
<tr>
<td>Encumbrances Control</td>
</tr>
</tbody>
</table>

Reclassification Journal Entries

15. Restrict Balance Sheet Fund Balance for outstanding Encumbrances

<table>
<thead>
<tr>
<th>Unreserved Fund Balance</th>
<th>$22,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund Balance Reserved</td>
<td></td>
</tr>
<tr>
<td>for Encumbrances</td>
<td></td>
</tr>
<tr>
<td>$22,000</td>
<td></td>
</tr>
</tbody>
</table>

16. At the end of the accounting period, any uncollected taxes should be reclassified from current to delinquent along with the related estimated uncollectible taxes.

| Taxes Receivable – Delinquent  | $98,000 |
| Estimated Uncollectible Taxes – Current | 95,000 |
| Taxes Receivable – Current     | 98,000  |
| Estimated Uncollectible Taxes – Delinquent | 95,000 |

SPECIAL REVENUE FUNDS – FUND BASED ACCOUNTING

Special Revenue Funds are used to account for revenues derived from specific taxes or other earmarked revenue sources. They are usually required by statute, charter provision, or local ordinance to finance particular functions or activities of government. Examples of such funds are those established for the benefit of facilities such as parks, schools, and museums and for particular functions or activities such as highway construction, street maintenance, law enforcement, and the licensing and regulation of professions and businesses. A Special Revenue Fund may be required for financing either current operating expenditures or capital outlays, or both.

The accounting principles applicable to the General Fund apply generally to all Special Revenue Funds, and in the absence of legal requirements to the contrary, the same basis of accounting should be used for the Special Revenue Funds of a governmental unit as is used for its General Fund.

CAPITAL PROJECTS FUND - FUND BASED ACCOUNTING

Accounts for the purchase or construction of major capital facilities.

The Capital Projects Fund has a limited life. It continues to operate until all of the proceeds derived from the sale of the bonds are expended. When the fund finances the construction of improvements, proceeds are expended gradually as construction proceeds.

Expenditures are closed at the end of each fiscal period.

- Review the following Illustrative Problem:
- Notice the expanded budget journal entry in Number 1.
- Note that the sale of bonds in Number 2 is credited to other financing sources, not to bonds payable.
Illustrative Problem:
1. Hilltop City proposed the construction of a new $490,000 municipal building and authorized the issuance of $300,000 of bonds on April 1 with $200,000 to be financed equally by State and Federal matching funds.
2. The bonds are sold for $308,000, including a premium of $8,000.
3. A $300,000 contract is entered into with Paul Construction Co. for the main building to be completed in 4 months. The city is to purchase some material and furnish some labor for the project.
4. Wages up to the end of the fiscal year were $18,000 and were paid.
5. Purchase orders for $17,000 of materials were placed on May 15.
6. A bill for $150,000 was received from Paul Construction Co. on June 20 for construction to date.
7. On June 15 a bill for $15,000 for all of the materials ordered on May 15 was received.
8. On June 30 the city paid the bill due Paul Construction Co. but retained 10%.
9. On June 30 $6,000 of materials was ordered.

Prepare: Journal entries to record all transactions.

Illustrative Solution:
1. Estimated Revenue Control $200,000
   Estimated Other Financing Source Control 300,000
   Appropriations Control $490,000
   Budgetary Fund Balance 10,000

1a. Due from State $100,000
    Due from Federal Government 100,000
    Revenues Control $200,000

2. Cash $308,000
   Other Financing Sources Control (Proceeds of Gen'l Obligation Bonds) $308,000
   Other Financing Sources Control (Operating Transfer Out) $8,000
   Cash $8,000
   (to record transfer of premium to Debt Service Fund)

3. Encumbrances Control $300,000
   Budgetary Fund Balance Reserve for Encumbrances $300,000

4. Expenditures Control $18,000
   Cash $18,000

5. Encumbrances Control $17,000
   Budgetary Fund Balance Reserve for Encumbrances $17,000

6. Expenditures Control $150,000
   Contracts Payable $150,000
   Budgetary Fund Balance Reserve for Encumbrances $150,000
   Encumbrances Control $150,000
7. Budgetary Fund Balance  
   Reserve for Encumbrances $17,000  
   Encumbrances Control $17,000  
   Expenditures Control $15,000  
   Vouchers Payable $15,000  

8. Contracts Payable $150,000  
   Cash $135,000  
   Contracts Payable—Retained Percentage 15,000  

9. Encumbrances Control $6,000  
   Budgetary Fund Balance  
   Reserve for Encumbrances $6,000  

Closing Entries  

10. Step One: Close the budgetary accounts.  
    Appropriations Control $490,000  
    Budgetary Fund Balance 10,000  
    Estimated Revenues Control $200,000  
    Estimated Other Financing Sources Control 300,000  

11. Step Two: Close Revenue, Expenditures, and Other Financing accounts to Unreserved Fund Balance.  
    Revenues Control $200,000  
    Other Financing Sources Control 308,000  
    Expenditures Control $183,000  
    Unreserved Fund Balance 317,000  
    Other Financing Sources Control 8,000  

12. Step Three: Close Encumbrance Accounts  
    Budgetary Fund Balance  
    Reserve for Encumbrances $156,000  
    Encumbrances Control $156,000  

13. Reclassification: Restrict Balance Sheet Fund Balance for outstanding Encumbrances  
    Unreserved Fund Balance $156,000  
    Fund Balance Reserved for Encumbrances $156,000  

DEBT SERVICE FUNDS – FUND BASED ACCOUNTING  

The function of this fund is to accumulate resources for the payment of principal and interest on general obligation long-term debt.  

The debt service fund does not account for the debt itself and does not use encumbrances. The "when due" non-accrual approach is normally used. However,
Typical journal entries are as follows:

1. Debt service fund receives a $500,000 transfer from the general fund for the payment of interest and long-term debt.
   
   \[
   \begin{array}{c|c|c}
   \text{Cash} & \text{Other Financing Sources – transfers in} & \$500,000 \\
   \end{array}
   \]

2. To record the payment of debt and interest:
   
   \[
   \begin{array}{c|c|c}
   \text{Expenditures control} & \text{Cash} & \$500,000 \\
   \end{array}
   \]

**Special Assessments**

Special Assessment Funds were used to account for compulsory levies made against certain properties to defray part of all costs of specific capital improvements or services deemed to benefit primarily those properties. GASB No. 6 eliminates the Special Assessment Fund for financial reporting purposes and requires that these special assessments are accounted for in the Capital Projects Fund.

**Summary of "Governmental Accounting Standards Board Statement No. 6"**

1) The "Special Assessment Fund" is eliminated for financial reporting purposes.

2) Transactions of a "service type" special assessment should be reported in the fund type that best reflects the nature of the transactions; usually the general fund, a special revenue fund, or an enterprise fund.
   
   a. "Service-type" special assessment revenues should be treated like "user fees."
   
   b. Assessment revenues and expenditures for which the assessments were levied should be recognized on the same basis of accounting as that normally used for that fund type.

3) If the government is obligated in some manner to assume payments on special assessment debt on "capital type" special assessments, in the event of default by the property owners, all transactions related to capital improvements financed by special assessments should be reported in the same fund types and on the same basis as any other capital improvement and financing transactions.
   
   a. The fixed assets constructed or acquired should be reported in the general fixed assets account group or in an enterprise fund, as appropriate.

**Proprietary Funds**

There are two proprietary funds that focus on “economic resources management” and use the accrual basis of accounting. These funds are like profit-seeking business organizations where the intent is to have all costs and expenses of providing the services to be financed by the users of such services. They are: The Enterprise Fund and The Internal Service Fund.

There are two proprietary funds that focus on “economic resources management” and use the accrual basis of accounting. These funds are like profit seeking business organizations where the intent is to have all costs and expenses of providing the services to be financed by the users of such services. They are: The Enterprise Fund and The Internal Service Fund.

**ENTERPRISE FUND**

The Enterprise Fund is used to account for financing of self-supporting enterprises which render public service. Examples of enterprise funds are water, electricity, gas, steam, etc. Accounting for the enterprise fund is the same as that for privately owned utilities and no budgetary entries are necessary. Fixed assets and bonds are, therefore, included in the accounts of an enterprise fund. Enterprise activities are frequently administered by departments of general-purpose governments, such as a municipal water department or a state parks department. In other cases these activities are the exclusive function of a local special district—water district, power authority, port authority, etc. Regardless of the pattern of governmental organization, however, the significant attribute of such enterprise activities is that they are financed primarily by charges to consumers and that the accounting for them must make it possible to show whether they are operated at a profit or loss similar to private enterprises.
# City of Passville
## Enterprise Fund Type
### Balance Sheet
December 31, Year 4

<table>
<thead>
<tr>
<th>Current Assets:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
</tr>
<tr>
<td>Accounts receivable - Customers</td>
</tr>
<tr>
<td>Less: estimated uncollectible AR</td>
</tr>
<tr>
<td>Due from General Fund</td>
</tr>
<tr>
<td>Inventory of Materials and supplies</td>
</tr>
<tr>
<td>Total current assets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Restricted Assets:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue Bond reserves</td>
</tr>
<tr>
<td>Cash</td>
</tr>
<tr>
<td>Investments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer Deposits:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments</td>
</tr>
<tr>
<td>Interest Receivable on investments</td>
</tr>
<tr>
<td>Total restricted Assets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Utility plant in service:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
</tr>
<tr>
<td>Building</td>
</tr>
<tr>
<td>Less: Allowance for depreciation</td>
</tr>
<tr>
<td>Construction in progress</td>
</tr>
<tr>
<td>Total plant in service</td>
</tr>
<tr>
<td>Total assets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities, Reserves, Contributions, and Retained Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current liabilities (payable from current assets)</td>
</tr>
<tr>
<td>Vouchers payable</td>
</tr>
<tr>
<td>Accrued wages payable</td>
</tr>
<tr>
<td>Advance from municipal general obligation Bonds</td>
</tr>
<tr>
<td>Current liabilities (Payable from restricted assets)</td>
</tr>
<tr>
<td>Construction contracts payable</td>
</tr>
<tr>
<td>Customer deposits</td>
</tr>
<tr>
<td>Other liabilities: Advance from municipal general obligation bonds</td>
</tr>
<tr>
<td>Total liabilities</td>
</tr>
<tr>
<td>Reserves - for revenue bonds</td>
</tr>
<tr>
<td>Contributions from municipality</td>
</tr>
<tr>
<td>Contributions from customers</td>
</tr>
<tr>
<td>Total contributions</td>
</tr>
<tr>
<td>Retained earnings</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>
INTERNAL SERVICE FUND

Internal Service Funds are established to finance and account for services and commodities furnished by a designated agency of a governmental unit to other departments of the same governmental unit. Typical examples of Internal Service Funds are those established for central garages and motor pools, central printing and duplicating services, and central purchasing and stores departments.

Resources for the establishment of Internal Service Funds are derived from one or more of the following three sources: (1) contributions from another operating fund, such as the General Fund or an Enterprise Fund; (2) the sale of general obligations bonds, and (3) by long-term advances from other funds which are to be repaid over a specified period of time from the earnings of this fund. Once the fund's capital has been acquired from one or more of these sources, cash is expended for materials, parts and supplies which are used in the same form as purchased or are manufactured into other products and issued to the various using departments. These departments are charged with the cost of such materials, parts, and supplies plus labor and overhead. The Service Fund is then reimbursed by interdepartmental cash transfers from the budgeted appropriations of the departments served. Throughout the entire cycle of these operations, the financial objective of the fund is to recover the complete costs of operations, including overhead, without producing any significant amount of profit in the long run.

Since each department served by an Internal Service Fund will include among its estimated expenditures an amount sufficient to cover the estimated cost of services and commodities to be secured from the Service Fund, the latter fund does not have the same status or budgetary requirements in the annual budget as other operating funds. The accounting for all Service Funds should be on the accrual basis, with all charges to departments being billed at the time services are rendered and expenditures being recorded when incurred. With the exception of buildings financed from Capital Projects Funds, depreciation must be recorded on fixed assets to secure an accurate computation of costs and to prevent depletion of the fund's capital.

When a Service Fund is created, the entry to be made will depend upon the source of fund capital. If the fund's capital is acquired as a contribution from the General Fund, the entry would be a debit to Cash and a credit to Contribution from General Fund. If the fund is created by the proceeds of a general obligation bond issue—a less frequent procedure—the entry to be made in the Service Fund upon receipt of cash from the Capital Projects Fund is a debit to Cash and a credit to Contribution from General Obligation Bonds. Where fund capital is in the form of a long-term loan from another fund of the same governmental unit, the credit in this opening entry would be to Advance from General (or other) Fund. It is important that the latter account title be used to differentiate the resulting liability from the Due to Other Funds account which refers only to short-term liabilities.

Bonds, notes, and other long-term liabilities (e.g., for capital leases, pensions, judgments, and similar commitments) directly related to and expected to be paid from entity funds should be included in the accounts. These are specific fund liabilities, even though the full faith and credit of the governmental unit may be pledged as further assurance that the liabilities will be paid. Too, such liabilities may constitute a mortgage or lien on specific fund properties or receivables.

At the time charges are billed, the exact amounts of overhead expenses are usually not known. Moreover, even if they were known, it is desirable to charge overhead expenses at a uniform rate throughout the year to prevent jobs worked on during a month when large indirect expenses were incurred from being charged more than identical jobs performed during another month when overhead expenses happened to be low. Therefore, departments are billed with direct costs plus a uniform rate per mile, per hour, or other applicable unit of measurement for their portion of the estimated total overhead charges for the fiscal year. The entry to record such billings is a debit to Due from (name of) Fund and a credit to Operating Revenues Control.

Accounting for the Internal Service Fund is the same as industrial accounting, and the balance sheet and the income statement follow GAAP. No budget is necessary. The excess of assets over liabilities consists of the source of funds to start the activity such as "Contribution from General Fund" and "Retained Earnings," which would ordinarily be small.
City of Passville
Internal Service Type Fund
Balance Sheet
December 31, Year 4

Current Assets:
Cash
Due from general fund
Inventory of materials and supplies
   Total current assets

Fixed assets:
Machinery and equipment
Less - Allowance for depreciation
   Total fixed assets
   Total assets

Liabilities, Contribution and Retained Earnings
Vouchers payable

Long-term liabilities:
Advance from general fund
Contributions from general fund
Retained earnings
   Total liabilities, contributions and Retained Earnings

Illustrative Journal Entries for Central Garage Fund
1. Inventory of Material and Supplies
   Vouchers Payable
   To record purchases of material and supplies.

2. Operating Expenses Control
   Inventory of Material and Supplies
   To record usage of material and supplies.

3. Operating Expenses Control
   Vouchers Payable
   To record liability of expenses incurred for salaries, wages, shop supplies and utilities.

4. Building
   Equipment
   Vouchers Payable
   To record cost of addition to building and cost of equipment installed.

5. Operating Expenses Control
   Accumulated Depreciation—Building
   Accumulated Depreciation—Equipment
   To record depreciation charges.

6. Due from Special Revenue Fund—Schools
   Due from General Fund
   Operating Revenues Control
   To record billings for services rendered.
7. Operating Revenues Control
   Operating Expenses Control
   Unreserved Retained Earnings
To close out revenue and expense accounts and arrive at the excess of net charges over costs (net income) for the year.

FUND-BASED FINANCIAL STATEMENTS

• Focus and Criteria
The focus of governmental and proprietary fund financial statements is on major funds (but major fund reporting is not required for internal service funds). Each major fund is presented in a separate column, and Non-major funds are aggregated in one column. Combining statements are not required for non-major funds.

The main operating fund such as the general fund or its equivalent is always a major fund. For other funds to be considered a major fund they must meet the following criteria established by GASB statement #34 in paragraph 76:

1. Total assets, liabilities, revenues, or expenditures/expenses of that individual governmental or enterprise fund are at least 10 percent of the corresponding total (assets, liabilities, and so forth) for all funds of that category or type (that is, total governmental or total enterprise funds), and

2. Total assets, liabilities, revenues or expenditures/expenses of the individual governmental fund or enterprise fund are at least 5 percent of the corresponding total for all governmental and enterprise funds combined.

In addition to funds that meet the major fund criteria, any other governmental or enterprise fund that the government’s officials believe is particularly important to financial statement users (for example, because of public interest or consistency) may be reported as a major fund.

• Types of Fund Financial Statements
SGAS 34 requires the following fund-based financial statements:

   Governmental Funds
   Balance Sheet
   Statement of Revenues, Expenditures, and Changes in Fund Balances

   Proprietary Funds
   Statement of Net Assets (or Balance Sheet)
   Statement of Revenues, Expenses, and Changes in Fund Net Assets (or Fund Equity)
   Statement of Cash Flows (must use the direct method)

   Fiduciary Funds
   Statement of Fiduciary Net Assets
   Statement of Changes in Fiduciary Net Assets

Reconciliation
A reconciliation of the fund financial statements to the government-wide statements is also required. This reconciliation must be presented at the bottom of the fund statements or in an accompanying schedule.

Note: Candidates should know the various types of financial statements, but concentrate on the details of the Governmental Funds Balance Sheet and Statement of Revenues, Expenditures, and Changes in Fund Balances.
GOVERNMENTAL FUNDS BALANCE SHEET

Please review the Sample City governmental balance sheet (Exhibit I).

- Note that a separate column is presented for the general fund plus three other funds that meet the criteria for separate column disclosure. All other funds not considered major are grouped together in the “other” column.

- No capital assets or long-term debt are reported because governmental funds focus on measuring current financial resources.

- The “Total Governmental Funds” column includes internal amounts for due from other funds and due to other funds. These inter-fund accounts are not eliminated.

- The final total fund balances figure for the governmental funds of approximately $34.9 million is significantly different from the $123.6 million in total net assets reported for governmental activities as a whole in the statement of net assets. (See Exhibit A)

To help understand that large discrepancy a reconciliation is included at the bottom of the balance sheet. This reconciliation shows that four amounts were left off the balance sheet: capital assets, other long-term assets, internal service fund accounts, and long-term debt. Those items made up the difference in the two totals.

Note: The Governmental-wide Financial Statements are presented a little later in the chapter as Exhibit A and B.

GOVERNMENTAL FUNDS – STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES

- The revenues are listed by source and the expenditures by function. For example, expenditures are listed for the function called “Public Safety.” Therefore, no net revenue or expense can be determined for Public Safety.

- Since the current financial resource management focus is being applied, the term “expenditure” instead of expense is being used.

- Other financing sources (uses) reflect proceeds of bonds and inter-company transfers. Again these inter-fund accounts were not eliminated.

- GASB Statement 34 in paragraph 56 explains the “special item” section at the bottom of the report as “significant transactions or other events within the control of management that are either unusual in nature or infrequent in occurrence are special items. Special items should also be reported separately in the statement of activities, before extraordinary items, if any.”

- Note: Once we have covered Governmental-wide Financial Statements, please come back and review the reconciliation in Exhibit II.
### Exhibit I

#### Sample City

#### Balance Sheet

Governmental Funds

**December 31, Year 5**

<table>
<thead>
<tr>
<th></th>
<th>General</th>
<th>HUD Programs</th>
<th>Community Redevelopment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$3,418,485</td>
<td>$1,236,523</td>
<td>$ —</td>
</tr>
<tr>
<td>Investments</td>
<td>—</td>
<td>—</td>
<td>13,262,895</td>
</tr>
<tr>
<td>Receivables, net</td>
<td>3,644,561</td>
<td>2,563,458</td>
<td>353,340</td>
</tr>
<tr>
<td>Due from other funds</td>
<td>1,370,757</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Receivables from other governments</td>
<td>—</td>
<td>119,059</td>
<td>—</td>
</tr>
<tr>
<td>Liens receivable</td>
<td>791,926</td>
<td>3,195,745</td>
<td>—</td>
</tr>
<tr>
<td>Inventories</td>
<td>182,821</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$9,408,550</td>
<td>$7,504,765</td>
<td>$13,616,035</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Route 7 Construction</th>
<th>Other Governmental Funds (See H-1)</th>
<th>Total Governmental Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LIABILITIES AND FUND BALANCES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$3,406,680</td>
<td>$129,275</td>
<td>$190,548</td>
</tr>
<tr>
<td>Due to other funds</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Payable to other governments</td>
<td>94,074</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>4,250,490</td>
<td>6,273,045</td>
<td>250,000</td>
</tr>
<tr>
<td><strong>Total liabilities (Note 2)</strong></td>
<td>7,753,164</td>
<td>8,463,389</td>
<td>440,548</td>
</tr>
</tbody>
</table>

| Fund balances:         |                       |                                  |                         |
| Reserved for:          |                       |                                  |                         |
| Inventories            | 182,821               | —                                 | —                       |
| Liens receivable       | 791,926               | —                                 | —                       |
| Encumbrances           | 40,292                | 41,034                            | 119,314                |
| Debt service           | —                    | —                                 | —                       |
| Other purposes         | —                    | —                                 | —                       |
| **Unreserved, reported in:** |                   |                                  |                         |
| General fund           | 640,327               | —                                 | 182,821                 |
| Special revenue funds  | —                    | —                                 | 791,926                 |
| Capital projects funds | —                    | —                                 | 5,792,587               |
| **Total fund balances** | 1,655,326          | 1,035,342                          | 3,832,062               |
| **Total liabilities and fund balances** | $9,408,550 | $7,504,765                         | $13,616,035             |

**Amounts reported for governmental activities in the statement of net assets (A-1) are different because (see Note 4, also):**

- Capital assets used in governmental activities are not financial resources and therefore are not reported in the funds.
- Other long-term assets are not available to pay for current-period expenditures and therefore are deferred in the funds.
- Internal service funds are used by management to charge the costs of certain activities, such as insurance and telecommunications, to individual funds. The assets and liabilities of the internal service funds are included in governmental activities in the statement of net assets (see D-1).
- Long-term liabilities, including bonds payable, are not due and payable in the current period and therefore are not reported in the funds (see Note 4a). Net assets of governmental activities: $123,558,874

---

Explanations of the reconciling amounts need not be as detailed as the ones illustrated here. In some cases, detailed explanations on the face of the statements may eliminate the need for further descriptions in the notes. On the other hand, long, complicated explanations on the statement may distract the user's attention from the other information presented. Preparers should weigh the advantages of eliminating the need for users to refer to the notes against the possible disadvantage of overloading the statement with information. In some situations, however, additional disclosure or reconciling items is required, as discussed in paragraph 77.

The reconciliation could be presented on an accompanying page, rather than on the face of the statement. (See the separate reconciliation example in C-3.)
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-22</td>
<td>$1,234</td>
</tr>
<tr>
<td>987-654</td>
<td>$2,345</td>
</tr>
<tr>
<td>222-988</td>
<td>$5,678</td>
</tr>
<tr>
<td>666-666</td>
<td>$7,890</td>
</tr>
<tr>
<td>111-111</td>
<td>$9,000</td>
</tr>
<tr>
<td>444-444</td>
<td>$1,234</td>
</tr>
</tbody>
</table>

**Total:** $25,000

---

**Notes:**
- Item 15-22 includes a charge of $1,234.
- Item 987-654 has a credit of $2,345.
- Item 222-988 is a loan of $5,678.
- Item 666-666 is a deposit of $7,890.
- Item 111-111 shows a balance of $9,000.
- Item 444-444 has a withdrawal of $1,234.
Sample City
Reconciliation of the Statement of Revenues, Expenditures,
and Changes In Fund Balances of Governmental Funds
to the Statement of Activities
For the Year Ended Year 5

Net change in fund balances-total governmental funds (from C-2) $ (106,657)

Amounts reported for governmental activities in the statement of activities (B-1) are different because (see Note 5, also):

Governmental funds report capital outlays as expenditures. However, in the statement of activities, the cost of those assets is allocated over their estimated useful lives as depreciation expense. This is the amount by which capital outlays exceeded depreciation in the current period. 14,039,717

In the statement of activities, only the gain on the sale of the park land is reported, whereas in the governmental funds, the proceeds from the sale increase financial resources. Thus, the change in net assets differs from the change in fund balance by the cost of the land sold. (823,000)

Revenues in the statement of activities that do not provide current financial resources are not reported as revenues in the funds. 1,920,630

Bond proceeds provide current financial resources to governmental funds, but issuing debt increases long-term liabilities in the statement of net assets. Repayment of bond principal is an expenditure in the governmental funds, but the repayment reduces long-term liabilities in the statement of net assets. This is the amount by which proceeds exceeded repayments (see Note 5a). (16,140,416)

Some expenses reported in the statement of activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds. (1,245,752)

Internal service funds are used by management to charge the costs of certain activities, such as insurance and telecommunications, to individual funds. The net revenue (expense) of the internal service funds is reported with governmental activities (see D-3). (758,808)

Change in net assets of governmental activities (see B-1) $ (3,114,286)

The reconciliation could be presented on the face of the statement, rather than on a separate page. (See the reconciliation in C-1.)
GOVERNMENT-WIDE FINANCIAL STATEMENTS

Government-wide financial statements provide an overall entity perspective and include information about the long-term stewardship of governmental resources. In other words, the financial statements report a government’s activities and financial position as a whole. On page 2 of the preface to SGAS 34, the GASB stated that government-wide financial statements will help users:

- Assess the finances of the government in its entirety, including the year’s operating results
- Determine whether the government’s overall financial position improved or deteriorated
- Evaluate whether the government’s current-year revenues were sufficient to pay for current-year services.
- See the cost of providing services to its citizenry
- See how the government finances its programs—through user fees and other program revenues versus general tax revenues
- Understand the extent to which the government has invested in capital assets, including roads, bridges, and other infrastructure assets
- Make better comparisons between governments.

To achieve these goals, the government-wide financial statements use an economic resources focus and accrual accounting. All assets and liabilities are reported and all revenues and expenses are recognized in a way comparable to business-type accounting.

PRIMARY GOVERNMENTS AND COMPONENT UNITS

Government-wide financial statements differentiate between the primary government and component units.

- The primary government unit is usually a city, town, county, parish, state or a general-purpose local government. For example, a local school system may be deemed a primary government unit if it is legally independent, fiscally independent and has a separately elected governing body.
- Component units are any functions that are legally separate from the primary government but where financial accountability exists. Examples are a Transit Authority, ABC Board, Redevelopment Commission or Housing Authority.

GOVERNMENT AND BUSINESS-TYPE ACTIVITIES

The primary government is divided into governmental activities and business-type activities.

- **Governmental activities** summarize all the activities in the governmental funds into one column (See Exhibit A). The governmental funds must be adjusted from modified accrual to accrual and from a current resources focus to an economic measurement focus. These adjustments may be made on a worksheet or through specialized software. The major adjustments would be to eliminate the budgetary and encumbrance accounts, to record the fixed assets, the depreciation, long-term debt and accrue the bond interest. For example, the other financing sources – bond proceeds account used in fund-based accounting would be reclassified to bonds payable or the expenditures – capital assets account used in fund-based accounting would be reclassified to capital assets.

The governmental activities column usually includes the Internal Service Funds. Even though the Internal Service Funds are considered proprietary funds for fund reporting, they are normally included in governmental activities for government-wide reporting. The logic is that their services are rendered primarily to benefit activities with governmental funds.

However, if a particular Internal Service Fund predominantly services an enterprise fund, the internal service fund should be included as a business-type activity.
• **The business-type activities** column (Exhibit A) summarizes the activities of all the Enterprise Funds and any Internal Service Fund that predominantly services enterprise funds.

• The Fiduciary Funds are not included in government-wide financial statements because their resources are not available to finance governmental programs. (Remember the statement of fiduciary net assets and the changes in fiduciary assets are reported in fund-based financial statements).

**REQUIRED GOVERNMENT-WIDE FINANCIAL STATEMENTS**

SGAS 34 requires two government-wide financial statements:

• A Statement of Net Assets
• A Statement of Activities

**Statement of Net Assets**

Please review Exhibit A.

• Note primary government vs. component units.
• Note columns for governmental activities and business-type activities.
• The statement of net assets is a form of balance sheet except the equity section is replaced by three types of net assets.
• GASB encourages assets and liabilities to be presented in order of liquidity for assets and due dates for liabilities or as a classified statement indicating current and non-current sections.
• **Internal asset balances** ($175,000) result from inter-activities transactions between the governmental activities and business-type activities. The internal balances reported on the statement offset each other so that there is not an impact on the total primary government. Intra-activities solely within the governmental funds or the business-type funds should not be reported because the assets and liabilities cancel out. For example, a due to the capital projects fund account would be offset by a due from the general fund account. (Remember these accounts would be reported in fund-based statements).
• **Capital Assets** (Fixed Assets) are reported as historical cost less accumulated depreciation. Infrastructure assets such as roads, bridges, water & sewer systems, etc. are included as a part of capital assets and reported as net of accumulated depreciation.

**Exception:** SGAS 34 permits a modified approach in which depreciation need not be recorded if the infrastructure assets are a part of a network or a subsystem of a network (“eligible infrastructure assets”). The government must document that the assets are being preserved at approximately (or above) an established level disclosed by the government.

As a part of this documentation, the government must have in place an asset management system to monitor the particular eligible infrastructure assets. In addition, the government must be able to make an annual estimate of the cost of maintaining and preserving the infrastructure assets to meet the condition level requirements that have been established.

For example, the Golden Gate Bridge was built a number of years ago and if properly maintained will last indefinitely. So, what useful life should be used to depreciate the initial construction cost? Under the modified approach, the GASB stated that the life was indefinite and that depreciation should not be recorded. The cost of the bridge would be reflected by expensing all the maintenance cost necessary to preserve the bridge at an established condition level. However, cost of future additions or improvements must be capitalized and depreciation recorded.

• **Donated assets** are generally recorded at fair value the date of donation.
• **Collections of works of art or historical treasures or similar items** are normally capitalized and depreciated based on the theory that the useful lives are reduced by display or educational and research uses.
Exception: Capitalization is not required if the collection is used for public service and not for gain, protected, preserved, cared for, kept uncumbered, and subject to a policy that sale proceeds are used to obtain other items for the collection. (Note: This is the same theory used by the FASB in SFAS #116 that is covered in Chapter 16).

- Note that non-current liabilities are presented on the government-wide statements and not on the fund-based statements.

- Net assets are divided into three areas:

  1. Invested in capital assets net of related debt

  2. Restricted net assets – restricted in this case means restricted by external parties or imposed by law through constitutional provisions or enabling legislation. If permanent endowments or permanent fund principal amounts are included in restricted net assets, two additional components – expendable and non-expendable amounts should be displayed.

  3. Unrestricted net assets is a residual category. For example, net assets that are internally restricted should be listed in this category.

- Note that component units are shown to the far right side of the statement so that the reported amounts do not affect the primary government figures.

- Go back and review the reconciliation at the bottom of Exhibit I.

Statement of Activities

Please review Exhibit B

- Note that the right side of the statement is divided between primary government and component units.

- Expenses (not expenditures) are shown by function such as public safety rather than by object such as salaries, rent, depreciation, etc.

- SGAS 34 in paragraph 41 states that “as a minimum, governments should report direct expenses for each function. Direct expenses are those that are specifically associated with a service, program, or department and, thus, are clearly identifiable to a particular function.” Many indirect expenses are simply assigned to a relatively generic function such as general government; (first line under government activities on Exhibit B); however, as an alternative, indirect expenses can be allocated in some appropriate manner to the various operating functions.

- Interest expense on long-term debt is an exception to the disclosure by function rule and is shown by object. This is done because of its size and informational value.

- Remember that the internal service funds have been combined with the governmental activities. This means that the cost of the internal service funds must be allocated to the function to which it provides services. All intra-activities must be eliminated and the internal service funds’ net income reduced to zero.

- Revenues are divided into three areas: Charges for services
  Operating grants and contributions
  Capital grants and contributions
- **General revenues** include Taxes: (property taxes, levied for general purposes; property taxes, levied for debt service; franchise taxes; and public service taxes), payment from Sample City, grants and contributions not restricted to specific programs, investment earnings, miscellaneous.

- **The special item**—**gain on a sale of park land** is interesting. On the government-wide statements, only the gain is recognized but on the fund-based statements, (Exhibit II) total proceeds from the sale are recognized.

- **Format** - the statement of activities is a type of income statement but in a very unique format. (See Exhibit B.) It is designed to be read horizontally to indicate whether an area operated at a net revenue or expense. The report is read vertically to indicate the total change in net assets. For example, reading horizontally, the Health and Sanitation area’s expenses exceeded its revenues by $551,405, but reading vertically the total governmental activities show a decrease in net assets of $3,144,286. Again reading horizontally along the change in net asset line, the report indicates that this decrease in net assets under the governmental activities is offset by the increase of $3,219,885 for business activities for a total increase in net assets of $105,599.

Go back and review the reconciliation on Exhibit III.

### OVERVIEW OF CONCEPTS

The following overview may be helpful in looking at the two types of financial statements:

<table>
<thead>
<tr>
<th></th>
<th>Fund-based Financial Statements</th>
<th>Government-wide Financial Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Governmental funds</strong></td>
<td>Use the current financial resources measurement focus and modified accrual accounting for the timing of revenue and expenditure recognition.</td>
<td>Use the economic resources measurement focus and accrual accounting for the timing of revenue and expense recognition.</td>
</tr>
<tr>
<td><strong>Proprietary funds</strong></td>
<td>Use the economic resources measurement focus and accrual accounting for the timing of revenue and expense recognition</td>
<td>Use the economic resources measurement focus and accrual accounting for the timing of revenue and expense recognition.</td>
</tr>
<tr>
<td><strong>Fiduciary funds</strong></td>
<td>Use the economic resources measurement focus and accrual accounting for the timing of revenue and expense recognition.</td>
<td>Not included because fiduciary fund’s resources are not available for use by the governmental unit.</td>
</tr>
</tbody>
</table>
Exhibit A

Alternatively, the internal balances could be reported on separate lines as assets and liabilities. A notation would need to be added to inform the reader that the "Total" column is adjusted for those amounts.

### Sample City

#### STATEMENT OF NET ASSETS

December 31, Year 5

<table>
<thead>
<tr>
<th></th>
<th>Governmental activities</th>
<th>Business-type activities</th>
<th>Total</th>
<th>Component units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$13,597,899</td>
<td>$10,279,143</td>
<td>$23,877,042</td>
<td>$303,935</td>
</tr>
<tr>
<td>Investments</td>
<td>27,365,221</td>
<td>--</td>
<td>27,365,221</td>
<td>7,428,942</td>
</tr>
<tr>
<td>Receivables (net)</td>
<td>12,833,132</td>
<td>3,609,615</td>
<td>16,442,747</td>
<td>4,042,290</td>
</tr>
<tr>
<td>Internal balances</td>
<td>175,000</td>
<td>(175,000)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Inventories</td>
<td>577,149</td>
<td>176,674</td>
<td>448,823</td>
<td>83,697</td>
</tr>
<tr>
<td>Capital assets, net (Note 1)</td>
<td>170,022,760</td>
<td>151,388,751</td>
<td>321,411,511</td>
<td>37,744,786</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>244,516,161</td>
<td>165,229,183</td>
<td>389,545,344</td>
<td>49,603,660</td>
</tr>
</tbody>
</table>

|                     |                         |                          |                |                 |
| **Liabilities**     |                         |                          |                |                 |
| Accounts payable    | 6,783,310               | 751,430                  | 7,534,740      | 1,803,332       |
| Deferred revenue    | 1,435,599               | --                       | 1,435,599      | 38,911          |
| Noncurrent liabilities (Note 2): |                |                          |                |                 |
| Due within 1 year   | 9,236,000               | 4,426,286                | 113,662,286    | 1,426,639       |
| Due in more than 1 year | 83,502,378          | 74,482,273               | 137,984,551    | 27,108,151      |
| **Total liabilities** | 100,757,278            | 79,659,989               | 180,417,267    | 30,375,033      |

| **Net assets**      |                         |                          |                |                 |
| Invested in capital assets, net of related debt | 103,711,386            | 73,088,574              | 176,799,960    | 15,906,392      |
| Restricted for:     |                         |                          |                |                 |
| Capital projects    | 11,705,864              | --                       | 11,705,864     | 492,445         |
| Debt service        | 3,020,708               | 1,451,996                | 4,472,704      | --              |
| Community development projects | 4,811,043            | --                       | 4,811,043      | --              |
| Other purposes      | 3,214,302               | --                       | 3,214,302      | --              |
| Unrestricted (deficit) | (2,204,429)           | 11,028,624               | 8,824,195      | 2,820,790       |
| **Total net assets** | $123,558,874           | $85,569,194              | $209,128,068   | $19,228,627     |

*Net assets restricted for capital projects* includes approximately $13 million of capital debt for which the proceeds have not yet been used to construct capital assets.

*Source: GASB 54, page 201.*
### Sample City

**STATEMENT OF ACTIVITIES**

For the Year Ended December 31, Year 5

<table>
<thead>
<tr>
<th>Program Revenues</th>
<th>Operating</th>
<th>Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Charges for services</strong></td>
<td><strong>grants and contributions</strong></td>
<td><strong>grants and contributions</strong></td>
</tr>
<tr>
<td><strong>Net (expense) revenue and changes in net assets</strong></td>
<td><strong>Primary government</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Governmental activities</strong></td>
<td><strong>Business-type activities</strong></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td><strong>Component units</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Primary government

**Governmental activities:**

- **General government:**
  - **General government:** $9,571,410
  - **Public safety:** $19,888,550
  - **Public works:** $10,128,538
  - **Engineering services:** $1,299,645
  - **Health and sanitation:** $6,738,672
  - **Cemetery:** $735,866
  - **Culture and recreation:** $11,532,350
  - **Community development:** $2,994,389
  - **Education (payment to school district):** $21,893,273

- **Total governmental activities:** $105,807,013

**Business-type activities:**

- **Water:** $3,595,733
  - **Sewer:** $4,912,853
  - **Parking facilities:** $2,796,283

- **Total business-type activities:** $11,304,869

**Total primary government:** $117,111,882

#### Component units

- **Landfill:** $3,382,157
  - **Public school system:** $31,186,498

- **Total component units:** $34,568,655

#### General revenues:

- **Taxes:**
  - **Property taxes, levied for general purposes:** $51,693,573
  - **Property taxes, levied for debt service:** $4,726,244
  - **Franchise taxes:** $4,055,505
  - **Public service taxes:** $8,969,887

- **Grants and contributions not restricted to specific programs:** $1,457,820

- **Investment earnings:** $884,907

- **Miscellaneous:** $2,633,488

**Special item—gain on sale of park land:** $2,633,488

**Total general revenues, special items, and transfers:** $76,000,977

**Change in net assets:** $3,114,286

**Net assets—beginning:** $126,673,160

**Net assets—ending:** $123,558,874

Source: GASB 34, pp.208-9.

The detail presented for governmental activities represents the minimum requirement. Governments are encouraged to provide more details—for example, police, fire, EMS, and inspections—rather than simply “public safety.”
OVERVIEW OF MINIMUM DISCLOSURE REQUIREMENTS

SGAS 34 on page 5, paragraph 7, presents the following diagram that illustrates the minimum requirements for general purpose financial statements.

MANAGEMENT’S DISCUSSION AND ANALYSIS (MD&A)

One new requirement is that every government that reports GAAP financial statements present Management’s Discussion and Analysis as supplemental information preceding the financial statements. This analysis provides an overview of financial activities based on current known facts, decisions or conditions. It includes comparisons of current and prior years, with an emphasis on the current year, based on government-wide information.

GASB Statement Number 34 provides minimum requirements for the types of disclosures that must be included in the MD&A although a government is not prohibited from providing additional information and explanations. The MD&A presented by a government must have all of the following according to paragraph 11:

1. A brief discussion of the basic financial statements. This discussion should describe the relationship of the statements to each other and the significant differences in information provided. Analysis should also be included to help explain why measurements and results reported in the fund-based statements reinforce or provide additional information to the government-wide financial statements.
2. Condensed financial information derived from the government-wide financial statements comparing the current year to the prior year. At a minimum, governments should include:
   - Total assets, distinguishing between capital and other assets.
   - Total liabilities, divided between long-term and other liabilities.
   - Total net assets, distinguishing among amounts invested in capital assets, net of related debt; restricted amounts; and unrestricted amounts.
   - Program revenues, by major source.
   - General revenues, by major source.
   - Total revenues.
   - Program expenses, at a minimum by function.
   - Total expenses.
• Excess or deficiency before contributions to term and permanent endowments or permanent fund principal, special and extraordinary items, and transfers.
• Contributions.
• Special and extraordinary items.
• Transfers.
• Change in net assets.
• Ending net assets.
3. An analysis of overall financial position and results of operations to aid assessment of whether financial position has improved or deteriorated as a result of the year’s operations.
4. An analysis of balances and transactions of individual funds explaining the reasons for significant changes in fund balances or net assets as well as any significant restrictions.
5. An analysis of significant variations between original and final budget amounts along with variations between final budget amounts and actual results for the General Fund.
6. A description of significant capital asset and long-term debt activity during the year.
7. If the modified approach is used for some or all infrastructure assets, information should be provided about its application.
8. A description of currently known facts, decisions, or conditions that are expected to have a significant effect on financial position or results of operations

As can be seen, the MD&A is intended to provide a broad range of information to help decision-makers evaluate the operations and financial position of the government unit.

NOTES TO THE FINANCIAL STATEMENT

Notes to the financial statements are an integral part of the basic financial statements.

Some examples of items disclosed in the footnote are as follows:
• A description of the government-wide financial statements.
• A disclosure of the measurement focus and the basis of accounting for government-wide financial statements.
• Policy for eliminating internal activity in the statement of activities.
• Policy and details about capitalization of assets including, if applicable, the modified approach to reporting infrastructure assets.
• Normal details about long-term liabilities such as dates due and amounts.
• Segment information for activities that are reported using enterprise fund accounting.

REQUIRED SUPPLEMENTAL INFORMATION
(other than management’s discussion and analysis)

• Budgetary Comparison Schedules are required for the general fund and the special revenue fund. This schedule includes the original budget, the final budget and the actual revenues and expenditures. A variance column may or may not be used.
• Information about infrastructure assets reported using the modified approach. The disclosure includes schedules for the assessed condition of the assets (done every 3 years), the amounts needed to maintain the assets at the established condition level and the amounts actually expensed for each of the last five periods.
• Schedules of funding progress for entities reporting pension trust funds.
• Schedule of employer contributions for entities reporting pension trust funds.
SUMMARY OF REPORTING REQUIREMENTS

Since our text has covered each of these items in detail, it is helpful in summary to look at an outline of the minimum reporting requirements required by SGAS 34 for local governments and states.

- Management’s Discussion and Analysis (MD&A)
- Government-wide Financial Statements
  - Statement of Net Assets
  - Statement of Activities
- Fund-Based Financial Statements
  - Governmental Funds
    - Balance Sheet
    - Statement of Revenues, Expenditures, and Changes in Fund Balances
  - Proprietary Funds
    - Statement of Net Assets (or Balance Sheet)
    - Statement of Revenues, Expenses, and Changes in Fund Net Assets (or Fund Equity)
    - Statement of Cash Flows (Direct Method required)
  - Fiduciary Funds
    - Statement of Fiduciary Net Assets
    - Statement of Changes in Fiduciary Net Assets
- Notes to Financial Statement
- Required Supplementary Information (RSI) Other Than Management’s Discussion and Analysis

DIFFERENCES BETWEEN GOVERNMENT-WIDE AND FUND-BASED REPORTING

As mentioned early in the chapter, the obvious differences would include the elimination of the budgetary and encumbrance accounts, the adjusting from modified accrual to accrual, recording capital assets, long-term debts, depreciation, and accruing bond interest cost. A few of the differences should be noted:

- **Capitalized Leases** – The government-wide reporting is the same as for-profit enterprise. As a reminder, the normal journal entries are listed below:

  - **JE** Leased Assets XXX
    - Lease Obligation XXX
    - To record the signing of the lease agreement.
  - **JE** Depreciation Expense XXX
    - Accumulated Depreciation XXX
    - To record the depreciation on the leased asset.
  - **JE** Interest Expense XXX
    - Lease Obligation XXX
    - Cash XXX
    - To record lease payment, interest expense, and the reduction in the lease obligation.
• **Capitalized Leases – Fund-based reporting**

If the lease is recorded in the Enterprise Fund, the accounting would be the same as for government-wide reporting. However, in our example, assume the lease is recorded in the General Fund.

JE  
Expenditures – Leased Asset XXX  
Other Financing Sources – Capital Lease XXX  
To record the signing of the lease agreement (the amount would be the same as in government-wide reporting.)

JE  
No journal entry for depreciation

JE  
Expenditures – Interest XXX  
Expenditures – Lease Principal XXX  
Cash XXX  
To record lease payment, interest expense, and the reduction in the lease obligation.

• **Solid Waste Landfill**

Since candidates are normally not familiar with the accounting for landfills, a detailed example is probably needed.

Assume that ABC City opens a landfill in year one that is expected to take 10 years to fill. The city estimates $1,000,000 in closure cost and $1,000,000 in post closure cost. At the end of the first year the city estimates that the landfill is 12% filled and makes an initial payment of $100,000 on the closure cost.

For **Government-wide** reporting the city would use an economic resources measurement focus and accrual accounting. Since the landfill is 12% filled at the first year, 12% of the cost or $240,000 (12% x $2,000,000) should be recorded.

JE  
Expense – Landfill $240,000  
Landfill Closure Liability $240,000  
To record year one’s payment for the closure cost.

JE  
Landfill Closure Liability $100,000  
Cash $100,000  
To record year one’s payment for the closure cost.

For **Fund-Based reporting**, the city would use the same journal entries if the landfill was an Enterprise Fund. However, if the landfill is recorded in the General Fund, the current resources focus is used and only the current year’s payment is recorded.

JE  
Expenditures – Landfill Closure Cost $100,000  
Cash $100,000  
To record year one’s payment for the closure cost.

Although most of the recent discussion has revolved around the GASB’s massive 402 page SGAS 34, the GASB’s release of SGAS 33 is also important. The candidate should be familiar with the types of transactions and examples of each.

In December 1998, the GASB released its Statement Number 33, Accounting and Financial Reporting for Non-exchange Transactions” to provide a comprehensive system for recognizing the wide array of revenues applicable to state and local government units. This statement did not apply to true revenues such as interest or rents where an earning process exists. Instead, the GASB concentrated on “non-exchange transactions,” a classification that would encompass most taxes, fines, grants, and the like because the government does not have to provide a direct and equal benefit for the amount received.

For organizational purposes, the GASB classified all such non-exchange transactions into four distinct classifications, each with its own rules as to proper recognition:

- **Derived tax revenues.** Income taxes and sales taxes are the best example of this type of revenue. In a derived tax revenue transaction, a tax assessment is imposed because an underlying exchange takes place. A sale occurs and a tax is imposed, or income is earned and an income tax is assessed.

- **Imposed non-exchange revenues.** Property taxes and fines and penalties are viewed as imposed non-exchange revenues because the government imposes an assessment but no underlying transaction exists. Real estate or other property is owned and a property tax is levied each period. Ownership is being taxed by the government and not a specific transaction.

- **Government-mandated non-exchange transactions.** This category is used for monies such as grants that are conveyed from one government to another to help pay for the costs of required programs. For example, if a state specifies that a city must create a homeless shelter and then provides a grant of $400,000 to help defray the cost, that money should be recorded using these prescribed rules because the final goal for the money has been mandated by the state. City officials have no choice; the state government has required the shelter to be constructed and provided part or all of the funding.

- **Voluntary non-exchange transactions.** In this final classification, money has been conveyed willingly to the state or local government by an individual, another government, or an organization usually for a particular purpose. For example, assume that a state grants a city $300,000 to help improve reading programs in its schools. Unless the state has mandated an improvement in these reading programs, this grant would be accounted for as a voluntary non-exchange transaction. The decision has been made that use of the money will provide an important benefit but no government requirement exists that led to the conveyance.

**EXPENDITURE CLASSIFICATION**

In addition to the types of non-exchange transactions, the CPA Exam occasionally asks for definitions of various types of expenditures. Please concentrate on the definitions of “function,” “object,” and “character.”

The GASB Codification includes guidelines for the classification of governmental fund expenditure as set forth in NCGA Statement 1, paragraphs 111-116.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function (or Program)</td>
<td>provides information on the overall purposes</td>
<td>Highways and streets</td>
</tr>
<tr>
<td></td>
<td>Or objectives of expenditures</td>
<td>Health and welfare</td>
</tr>
<tr>
<td></td>
<td>Represents a major service or area of responsibility</td>
<td>Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public safety</td>
</tr>
<tr>
<td><strong>Organization unit</strong> (department)</td>
<td>Grouped according to the government’s organizational structure</td>
<td>The responsibility for a department is fixed</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td><strong>Activity</strong></td>
<td>Specific and distinguishable line of work performed by an organizational unit as part of one of its functions or Programs</td>
<td>More meaningful if the performance of each activity is fixed</td>
</tr>
<tr>
<td><strong>Character</strong></td>
<td>Classifies expenditures by the fiscal period benefited</td>
<td></td>
</tr>
<tr>
<td><strong>Object</strong></td>
<td>Classified according to the types of items purchased or service obtained</td>
<td></td>
</tr>
</tbody>
</table>

**Comprehensive Illustration**

The following transactions represent practical situations frequently encountered in accounting for municipal governments. Each transaction is independent of the others.

1. The city council of Bernardville adopted a budget for the general operations of the government during the new fiscal year. Revenues were estimated at $695,000. Legal authorizations for budgeted expenditures were $650,000.

2. Taxes of $160,000 were levied for the special revenue fund for Millstown. One percent was estimated to be uncollectible.

3. a. On July 25, Year 4, office supplies estimated to cost $2,390 were ordered for the city manager's office of Bullersville. Bullersville, which operates on the calendar year, does not maintain an inventory of such supplies.
   b. The supplies ordered July 25 were received on August 9, Year 4, accompanied by an invoice for $2,500.

4. On October 10, Year 4, the general fund of Washingtonville repaid to the utility fund a loan of $1,000 plus $40 interest. The loan had been made earlier in the fiscal year.

5. a. Conrad Thamm, a citizen of Basking Knoll, donated common stock valued at $22,000 to the city under a trust agreement. Under the terms of the agreement, the principal amount is to be kept intact; use of revenue from the stock is restricted to financing academic college scholarships for needy students.
   b. On December 14, Year 4, dividends of $1,100 were received on the stock donated by Mr. Thamm.

6. a. On February 23, Year 4, the town of Lincoln, which operates on the calendar year, issued 4% general obligation bonds with a face value of $300,000 payable February 23, Year 14, to finance the construction of an addition to the city hall. Total proceeds were $308,000.
   b. On December 31, Year 4, the addition to the city hall was officially approved, the full cost of $297,000 was paid to the contractor.
Assume the governments have formally adopted GASB Statement Number 34. First prepare journal entries for the governments based on the production of fund-based financial statements. Then prepare journal entries in anticipation of preparing government-wide financial statements.

**Solution to Comprehensive Illustration**

**Government-Wide Reports**

**Governmental Activities**

**Fund-based Reporting**

### 1. General Fund
- Estimated revenues control 695,000
- Appropriations control 650,000
- Budgetary fund balance 45,000

To record adoption of the budget.

### 2. Special Revenue Fund
- Taxes receivable-current 160,000
- Estimated uncollectible 1,600
- Revenues control 158,400

To record levy of taxes in special revenue fund.

### 3. General Fund
- Encumbrances control 2,390
- Fund balance reserved for Encumbrances 2,390

To record encumbrances for purchase orders.

### 4. General Fund
- Due to utility fund 1,000
- Expenditures control 40
  - Cash 1,040

To record disbursement to liquidate a loan from the utility fund.

### 5. Private-Purpose Trust Fund
- Investment in stock 22,000

To record contributions of stock

Cash 1,100
  - Dividend Revenue 1,100

To record receipt of dividends.
6. Capital Projects Fund

<table>
<thead>
<tr>
<th>Description</th>
<th>Cash</th>
<th>Bonds Payable</th>
<th>Bond Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash 308,000</td>
<td></td>
<td>300,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Other financing sources-bond proceeds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to debt service fund</td>
<td>8,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to debt service fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash 8,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-funds transfers are not recorded on</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>government-wide statements.</td>
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</tbody>
</table>

To record receipt of bond proceeds and transfer of bond premium to debt service fund

Debt Service Fund

<table>
<thead>
<tr>
<th>Description</th>
<th>Cash</th>
<th>Bond Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash 8,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other financing sources – transfers in</td>
<td>8,000</td>
<td></td>
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<tr>
<td>Intra-funds transfers are not recorded on</td>
<td></td>
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<tr>
<td>government-wide statements.</td>
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</tbody>
</table>

To record receipt of bond premium from capital projects fund.

Capital Projects Fund

<table>
<thead>
<tr>
<th>Description</th>
<th>Cash</th>
<th>Buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditures control 297,000</td>
<td></td>
<td>297,000</td>
</tr>
<tr>
<td>Expenditures control 297,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash 297,000</td>
<td></td>
<td>297,000</td>
</tr>
<tr>
<td>To record expenditures on building.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other financing uses – transfers out</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Cash 3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-funds transfers are not recorded on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>government-wide statements.</td>
<td></td>
<td></td>
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</tbody>
</table>

To record transfer of cash balance in capital projects fund to the debt service fund.

Debt Service Fund

<table>
<thead>
<tr>
<th>Description</th>
<th>Cash</th>
<th>Bond Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash 3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other financing sources – transfers in</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Intra-funds transfers are not recorded on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>government-wide statements.</td>
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</tbody>
</table>

To record the receipt of cash from the capital projects fund.

Note: Although the problem does not require adjusting journal entries, candidates should note that for government-wide reporting, adjusting journal entries would be made to accrue the interest to the bonds, to amortize the bond premium and to adjust office supplies for the supplies used.

Statement No. 39 of the Governmental Accounting Standards Board – Determining Whether Certain Organizations are Component Units (an amendment of GASB Statement No. 14)

Background: In GASB statement #14, component units were defined as legally separate organizations for which the elected officials of the primary government are financially accountable. In addition, a component unit can be another organization for which the nature and significance of its relationship with a primary government are such that exclusion would cause the reporting entity’s financial statements to be misleading or incomplete.

Specifically left out of the statement for further study were the reporting of foundations and other similarly affiliated organizations.

Statement #39 clarifies existing accounting guidance and provides greater consistency in accounting for such organizations that are closely related to primary governments.

Examples of such organizations are not-for-profit foundations of public universities, schools and qualifying fund raising foundations of state and local governments.
STATEMENT NO. 39

Statement No. 39 amends Statement No. 14 to provide additional guidance to determine whether certain organizations for which the primary government is not financially accountable should be reported as component units based on the nature and significance of their relationship with primary government.

The Statement sets forth criteria on which a government is required to provide a discrete presentation that published financial information about its own activities as well as those of the affiliated organization.

(Like the examples on pages 15-28 and 15-29)

Generally, it requires reporting, as a component unit, an organization that raises and holds economic resources for the direct benefit of a governmental unit.

Organizations that are legally separate, tax-exempt entities and that meet all of the following criteria should be discretely presented as component units. These criteria are:

1. The economic resources received or held by the separate organization are entirely or almost entirely for the direct benefit of the primary government, its component units, or its constituents.
2. The primary government, or its component units, is entitled to, or has the ability to otherwise access, a majority of the economic resources received or held by the separate organization.
3. The economic resources received or held by an individual organization that the specific primary government, or its component units, is entitled to, or has the ability to otherwise access, are significant to that primary government.

This Statement continues the requirement in Statement 14 to apply professional judgment in determining whether the relationship between a primary government and other organizations for which the primary government is not financially accountable and that do not meet these criteria is such that exclusion of the organization would render the financial statements of the reporting entity misleading or incomplete.
Chapter Fifteen
Governmental Accounting Questions

GASB

1. The primary authoritative body for determining the measurement focus and basis of accounting standards for governmental fund operating statements is the
   a. Governmental Accounting Standards Board (GASB).
   c. Government Accounting and Auditing Committee of the AICPA (GAAC).
   d. Financial Accounting Standards Board (FASB).

Concepts, Objectives, and Emphasis For Fund-based Reporting

2. The primary emphasis in accounting and reporting for governmental funds is on
   a. Flow of financial resources.
   b. Income determination.
   c. Capital maintenance.
   d. Transfers relating to proprietary activities.

3. For governmental fund types, which item is considered the primary measurement focus?
   a. Income determination.
   b. Flows and balances of financial resources.
   c. Capital maintenance.
   d. Cash flows and balances.

4. Which event(s) is(are) supportive of interperiod equity as a financial reporting objective of a governmental unit?
   I. A balanced budget is adopted.
   II. Residual equity transfers out equal residual equity transfers in.
   a. I only.
   b. II only.
   c. Both I and II.
   d. Neither I nor II.

5. Interperiod equity is an objective of financial reporting for governmental entities. According to the Governmental Accounting Standards Board, is interperiod equity fundamental to public administration and is it a component of accountability?

<table>
<thead>
<tr>
<th>Fundamental to public administration</th>
<th>Component of accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

6. Governmental financial reporting should provide information to assist users in which situation(s)?
   I. Making social and political decisions.
   II. Assessing whether current-year citizens received services but shifted part of the payment burden to future-year citizens.
   a. I only.
   b. II only.
   c. Both I and II.
   d. Neither I nor II.

7. In governmental accounting, a fund is
   I. The basic accounting unit.
   II. Used to assist in ensuring fiscal compliance.
   a. I only.
   b. II only.
   c. Both I and II.
   d. Neither I nor II.

8. The economic resources management focus is:
   a. used by the general fund for fund-based reporting
   b. used by the permanent funds for fund-based reporting
   c. a focus on the overall entity perspective and records information about long-term stewardship of governmental resources
   d. focus on the short-term results and the current inflows and outflows of governmental resources.

9. The current resources management focus in fund-based reporting is used by:
   a. Investment Trust Funds
   b. Permanent Funds
   c. Proprietary Funds
   d. Internal Service Funds

15Q-1
Type of Fund

10. The special revenue fund of a governmental unit is an example of what type of fund?
   a. Governmental.
   b. Proprietary.
   c. Internal service.
   d. Fiduciary.

For Fund-Based Reporting

11. Which of the following funds of a governmental unit uses the modified accrual basis of accounting?
   a. Internal service.
   b. Enterprise.
   c. Nonexpendable trust.
   d. Debt service.

12. Which of the following funds of a governmental unit integrates budgetary accounts into the accounting system?
   a. Enterprise.
   b. Special revenue.
   c. Internal service.
   d. Nonexpendable trust.

13. A capital projects fund of a municipality is an example of what type of fund?
   a. Internal service.
   b. Proprietary.
   c. Fiduciary.
   d. Governmental.

14. Fixed assets should be accounted for in the

<table>
<thead>
<tr>
<th>Capital projects fund</th>
<th>Internal service fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

15. Permanent Funds are classified as:
   a. Governmental Funds
   b. Proprietary Funds
   c. Fiduciary Funds
   d. Internal Service Funds

16. Investment Trust Funds are classified as:
   a. Governmental Funds
   b. Proprietary Funds
   c. Special Revenue Funds
   d. Fiduciary Funds

17. Which of the following funds of a governmental unit would include contributed capital in its balance sheet?
   a. Expendable pension trust.
   b. Special revenue.
   c. Capital projects.
   d. Internal service.

For Fund-Based Reporting

18. The basis of accounting for a capital projects fund is the
   a. Cash basis.
   b. Accrual basis.
   c. Modified cash basis.
   d. Modified accrual basis.

19. Which of the following funds of a governmental unit would include retained earnings in its balance sheet?
   a. Expendable pension trust.
   b. Internal service.
   c. Special revenue.
   d. Capital projects.

20. Tang City received land from a donor who stipulated that the land must remain intact, but any income generated from the property may be used for general government services. In which fund should Tang City record the donated land?
   a. Special revenue.
   b. Permanent.
   c. Private-purpose trust.
   d. Agency.

21. Taxes collected and held by Eldorado County for a school district would be accounted for in which of the following funds?
   a. Trust.
   b. Agency.
   c. Special revenue.
   d. Internal service.

22. The activities of a municipal employees' retirement and pension system should be recorded in a
   a. General fund.
   b. Capital projects fund.
   c. Internal service fund.
   d. Trust fund.
23. Private purpose trust funds are classified as:
   a. Governmental Funds
   b. Fiduciary Funds
   c. Enterprise Funds
   d. Proprietary Funds

**Modified Accrual For Fund-based Reporting**

24. The modified accrual basis of accounting should be used for which of the following funds?
   a. Capital projects fund.
   b. Enterprise fund.
   c. Pension trust fund.
   d. Proprietary fund.

25. Under the modified accrual basis of accounting for a governmental unit, revenues should be recognized in the accounting period in which they
   a. Are earned and become measurable.
   b. Are collected.
   c. Become available and earned.
   d. Become available and measurable.

26. Under which basis of accounting for a governmental unit should revenues be recognized in the accounting period in which they become available and measurable?

<table>
<thead>
<tr>
<th>Accrual basis</th>
<th>Modified accrual basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Budget**

**Items 30 through 32** are based on the following data:

   The Board of Commissioners of Vane City adopted its budget for the year ending July 31, Year 5, comprising estimated revenues of $30,000,000 and appropriations of $29,000,000. Vane formally integrates its budget into the accounting records.

30. What entry should be made for budgeted revenues?
   a. Memorandum entry only.
   b. Debit estimated revenues receivable control, $30,000,000.
   c. Debit estimated revenues control, $30,000,000.
   d. Credit estimated revenues control, $30,000,000.

31. What entry should be made for budgeted appropriations?
   a. Memorandum entry only.
   b. Credit estimated expenditures payable control, $29,000,000.
   c. Credit appropriations control, $29,000,000.
   d. Debit estimated expenditures control, $29,000,000.
32. What entry should be made for the budgeted excess of revenues over appropriations?
   a. Memorandum entry only.
   b. Credit budgetary fund balance, $1,000,000.
   c. Debit estimated excess revenues control, $1,000,000.
   d. Debit excess revenues receivable control, $1,000,000.

For Fund-Based Reporting

33. The Board of Commissioners of the City of Rockton adopted its budget for the year ending July 31, Year 6, which indicated revenues of $1,000,000 and appropriations of $900,000. If the budget is formally integrated into the accounting records, what is the required journal entry?
   a. Memorandum entry only
   b. Appropriations $  900,000
      General fund    100,000
      Estimated revenues  $1,000,000
   c. Estimated revenues $1,000,000
      Appropriations  $  900,000
      Budgetary fund balance  100,000
   d. Revenues receivable  $1,000,000
      Expenditures payable  $  900,000
      General fund balance  100,000

34. The estimated revenues control account of a governmental unit is debited when
   a. The budget is closed at the end of the year.
   b. The budget is recorded.
   c. Actual revenues are recorded.
   d. Actual revenues are collected.

35. Which of the following accounts of a governmental unit is credited when the budget is recorded?
   a. Encumbrances.
   b. Reserve for encumbrances.
   c. Estimated revenues.
   d. Appropriations.

36. Authority granted by a legislative body to make expenditures and to incur obligations during a fiscal year is the definition of an
   a. Appropriation.
   b. Authorization.
   c. Encumbrance.
   d. Expenditure.

Tax Levy

37. The revenues control account of a governmental unit is increased when
   a. The budget is recorded.
   b. Property taxes are recorded.
   c. Appropriations are recorded.
   d. The budgetary accounts are closed.

38. Which of the following accounts of a governmental unit is credited when taxpayers are billed for property taxes?
   a. Appropriations.
   b. Taxes receivable - current.
   c. Estimated revenues.
   d. Revenues.

39. The following information pertains to property taxes levied by Oak City for the calendar year Year 4:

   Collections during Year 4 $500,000
   Expected collections during the first 60 days of Year 5 100,000
   Expected collections during the balance of Year 5 60,000
   Expected collections during January Year 6 30,000
   Estimated to be uncollectible 10,000
   Total levy $700,000

What amount should Oak report for Year 4 net property tax revenues?
   a. $700,000.
   b. $690,000.
   c. $600,000.
   d. $500,000.

40. Which of the following types of revenue would generally be recorded directly in the general fund of a governmental unit?
   a. Receipts from a city-owned parking structure.
   b. Interest earned on investments held for retirement of employees.
   c. Revenues from internal service funds.
   d. Property taxes.
Encumbrances

41. The following related entries were recorded in sequence in the general fund of a municipality:

1. Encumbrances Control $12,000
   Fund balance reserved for encumbrances $12,000
2. Fund balance reserved for encumbrances $12,000
   Encumbrances Control $12,000
3. Expenditures Control $12,350
   Vouchers payable $12,350

The sequence of entries indicates that
a. An adverse event was foreseen and a reserve of $12,000 was created; later the reserve was cancelled and a liability for the item was acknowledged.
b. An order was placed for goods or services estimated to cost $12,000; the actual cost was $12,350 for which a liability was acknowledged upon receipt.
c. Encumbrances were anticipated but later failed to materialize and were reversed. A liability of $12,350 was incurred.
d. The first entry was erroneous and was reversed; a liability of $12,350 was acknowledged.

42. The budgetary fund balance reserved for encumbrances account of a governmental fund type is increased when
a. A purchase order is approved.
b. Supplies previously ordered are received.
c. Appropriations are recorded.
d. The budget is recorded.

43. Elm City issued a purchase order for supplies with an estimated cost of $5,000. When the supplies were received, the accompanying invoice indicated an actual price of $4,950. What amount should Elm debit (credit) to the reserve for encumbrances after the supplies and invoice were received?
a. ($50).
b. $50.
c. $4,950.
d. $5,000.

44. Which of the following accounts of a governmental unit is credited when a purchase order is approved?
a. Reserve for encumbrances.
b. Encumbrances.
c. Vouchers payable.
d. Appropriations.

45. Repairs that have been made for a governmental unit, and for which a bill has been received, should be recorded in the general fund as a debit to an
a. Expenditure.
b. Encumbrance.
c. Expense.
d. Appropriation.

46. Which of the following amounts are included in a general fund’s encumbrance account?
I. Outstanding vouchers payable amounts.
II. Outstanding purchase order amounts.
III. Excess of the amount of a purchase order over the actual expenditure for that order.
a. I only.
b. I and III.
c. II only.
d. II and III.

47. The following balances are included in the subsidiary records of Burwood Village's Parks and Recreation Department at March 31, Year 4:

- Appropriations -- supplies $7,500
- Expenditures -- supplies 4,500
- Encumbrances -- supply orders 750

How much does the Department have available for additional purchases of supplies?
a. $0.
b. $2,250.
c. $3,000.
d. $6,750.
Closing Entries

48. When Rolan County adopted its budget for the year ending June 30, Year 6, $20,000,000 was recorded for estimated revenues control. Actual revenues for the year ended June 30, Year 6, amounted to $17,000,000. In closing the budgetary accounts at June 30, Year 6,
   a. Revenues control should be debited for $3,000,000.
   b. Estimated revenues control should be debited for $3,000,000.
   c. Revenues control should be credited for $20,000,000.
   d. Estimated revenues control should be credited for $20,000,000.

49. Which of the following accounts should Moon City close at the end of its fiscal year?
   a. Vouchers payable.
   b. Expenditures.
   c. Fund balance.
   d. Fund balance — reserved for encumbrances.

50. Which of the following accounts of a governmental unit is (are) closed out at the end of the fiscal year?
    | Estimated revenues | Fund balance |
    |-------------------|--------------|
    | a. No             | No           |
    | b. No             | Yes          |
    | c. Yes            | Yes          |
    | d. Yes            | No           |

51. Harbor City's appropriations control account at December 31, Year 6, had a balance of $7,000,000. When the budgetary accounts were closed at year-end, this $7,000,000 appropriations control balance should have
   a. Been debited.
   b. Been credited.
   c. Remained open.
   d. Appeared as a contra account.

52. Oro County's expenditures control account at December 31, Year 6, had a balance of $9,000,000. When Oro's books were closed, this $9,000,000 expenditures control balance should have
   a. Been debited.
   b. Been credited.
   c. Remained open.
   d. Appeared as a contra account.

For Fund-Based Reporting

53. The estimated revenues control account balance of a governmental fund type is eliminated when
   a. The budget is recorded.
   b. The budgetary accounts are closed.
   c. Appropriations are closed.
   d. Property taxes are recorded.

54. For state and local governmental units, generally accepted accounting principles require that encumbrances outstanding at year-end be reported as
   a. Expenditures.
   b. Reservations of fund balance.
   c. Deferred liabilities.
   d. Current liabilities.

Special Revenue Fund

55. Revenues that are legally restricted to expenditures for specified purposes should be accounted for in special revenue funds, including
   a. Accumulation of resources for payment of general long-term debt principal and interest.
   b. Pension trust fund revenues.
   c. Gasoline taxes to finance road repairs.
   d. Proprietary fund revenues.

For Fund-Based Reporting

56. Revenues of a special revenue fund of a governmental unit should be recognized in the period in which the
   a. Revenues become available and measurable.
   b. Revenues become available for appropriation.
   c. Revenues are billable.
   d. Cash is received.

57. The following proceeds received by Grove City in Year 4 are legally restricted to expenditure for specified purposes:
   Donation by a benefactor mandated to provide meals for the needy $300,000
   Sales taxes to finance the maintenance of tourist facilities in the shopping district 900,000
   What amount should be accounted for in Grove's special revenue funds?
   a. $0
   b. $300,000
   c. $900,000
   d. $1,200,000
Capital Projects Fund

Items 58 and 59 are based on the following information:

On December 31, Year 4, Madrid Township paid a contractor $2,000,000 for the total cost of a new firehouse built in Year 4 on Township-owned land. Financing was by means of a $1,500,000 general obligation bond issue sold at face amount on December 31, Year 4, with the remaining $500,000 transferred from the general fund.

For Fund-based Reporting

58. What should be reported on Madrid's Year 4 financial statements for the capital project fund?

a. Revenues, $1,500,000; Expenditures, $1,500,000.
b. Revenues, $1,500,000; Other financing sources, $500,000; Expenditures, $2,000,000.
c. Revenues, $2,000,000; Expenditures, $2,000,000.
d. Other financing sources, $2,000,000; Expenditures, $2,000,000.

59. What should be reported on Madrid's Year 4 financial statements for the general fund?

a. Expenditures, $500,000.
b. Other financing uses, $500,000.
c. Revenues, $1,500,000; Expenditures, $2,000,000.
d. Revenues, $1,500,000; Other financing uses, $2,000,000.

For Fund-based Reporting

60. In Year 4, Menton City received $5,000,000 of bond proceeds to be used for capital projects. Of this amount, $1,000,000 was expended in Year 4. Expenditures for the $4,000,000 balance were expected to be incurred in Year 5. These bond proceeds should be recorded in capital projects funds for

a. $5,000,000 in Year 4.
b. $5,000,000 in Year 5.
c. $1,000,000 in Year 4 and $4,000,000 in Year 5.
d. $1,000,000 in Year 4 and in the general fund for $4,000,000 in Year 4.

For Fund-based Reporting

61. Financing for the renovation of Fir City's municipal park, begun and completed during Year 6, came from the following sources:

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant from state government</td>
<td>400,000</td>
</tr>
<tr>
<td>Proceeds from general obligation bond issue</td>
<td>500,000</td>
</tr>
<tr>
<td>Transfer from Fir's general fund</td>
<td>100,000</td>
</tr>
</tbody>
</table>

In its Year 6 capital projects fund operating statement, Fir should report these amounts as

<table>
<thead>
<tr>
<th>Revenues</th>
<th>Other financing sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $1,000,000</td>
<td>$0</td>
</tr>
<tr>
<td>b. $900,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>c. $400,000</td>
<td>$600,000</td>
</tr>
<tr>
<td>d. $0</td>
<td>$1,000,000</td>
</tr>
</tbody>
</table>

For Fund-based Reporting

62. Lisa County issued $5,000,000 of general obligation bonds at 101 to finance a capital project. The $50,000 premium was to be used for payment of principal and interest. This transaction should be accounted for in the

a. Capital projects funds, debt service funds, and the general long-term debt account group.
b. Capital projects funds and debt service funds only.
c. Debt service funds and the general long-term debt account group only.
d. Debt service funds only.

Debt Service Fund

63. In connection with Albury Township's long-term debt, the following cash accumulations are available to cover payment of principal and interest on

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonds for financing of water treatment plant construction</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>General long-term obligations</td>
<td>400,000</td>
</tr>
</tbody>
</table>

The amount of these cash accumulations that should be accounted for in Albury's debt service funds is

a. $0
b. $400,000
c. $1,000,000
d. $1,400,000
For Fund-Based Reporting

64. Tott City’s serial bonds are serviced through a debt service fund with cash provided by the general fund. In a debt service fund’s statements, how are cash receipts and cash payments reported?

<table>
<thead>
<tr>
<th>Cash receipts</th>
<th>Cash payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Revenues</td>
<td>Expenditures</td>
</tr>
<tr>
<td>b. Revenues</td>
<td>Operating transfers</td>
</tr>
<tr>
<td>c. Operating transfers</td>
<td>Expenditures</td>
</tr>
<tr>
<td>d. Operating transfers</td>
<td>Operating transfers</td>
</tr>
</tbody>
</table>

For Fund-Based Reporting

65. Wood City, which is legally obligated to maintain a debt service fund, issued the following general obligation bonds on July 1, Year 6:

- Term of bonds: 10 years
- Face amount: $1,000,000
- Issue price: 101
- Stated interest rate: 6%

Interest is payable January 1 and July 1. What amount of bond premium should be amortized in Wood's debt service fund for the year ended December 31, Year 6?

a. $1,000.
b. $500.
c. $250.
d. $0.

Items 66 and 67 are based on the following information:

The following events relating to the City of Albury's debt service funds occurred during the year ended December 31, Year 4:

- Debt principal matured: $2,000,000
- Unmatured (accrued) interest on outstanding debt at Jan. 1, Year 4: 50,000
- Interest on matured debt: 900,000
- Unmatured (accrued) interest on outstanding debt at Dec. 31, Year 4: 100,000
- Interest revenue from investments: 600,000
- Cash transferred from general fund for retirement of debt principal: 1,000,000
- Cash transferred from general fund for payment of matured interest: 900,000

All principal and interest due in Year 4 were paid on time.

For Fund-Based Reporting

66. What is the total amount of expenditures that Albury's debt service funds should record for the year ended December 31, Year 4?

a. $900,000.
b. $950,000.
c. $2,900,000.
d. $2,950,000.

Proprietary Funds

68. The following funds are among those maintained by Arlon City:

<table>
<thead>
<tr>
<th>Enterprise funds</th>
<th>$2,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal service funds</td>
<td>800,000</td>
</tr>
</tbody>
</table>

Arlon's proprietary funds amount to

a. $0
b. $800,000
c. $2,000,000
d. $2,800,000

69. The town of Hill operates municipal electric and water utilities. In which of the following funds should the operations of the utilities be accounted for?

a. Enterprise fund.
b. Internal service fund.
c. Agency fund.
d. Special revenue fund.

70. Which of the following is an appropriate basis of accounting for a proprietary fund of a governmental unit?

<table>
<thead>
<tr>
<th>Cash basis</th>
<th>Modified accrual basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
</tr>
<tr>
<td>d. No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
**Enterprise Fund**

71. An enterprise fund would be used when the governing body requires that

I. Accounting for the financing of an agency’s services to other government departments be on a cost-reimbursement basis.

II. User charges cover the costs of general public services.

III. Net income information be provided for an activity.

a. I only.

b. II only.

c. I and III.

d. II and III.

72. During Year 6, Spruce City reported the following receipts from self-sustaining activities paid for by users of the services rendered:

- Operation of water supply plant $5,000,000
- Operation of bus system 900,000

What amount should be accounted for in Spruce's enterprise funds?

a. $0

b. $900,000

c. $5,000,000

d. $5,900,000

73. Fixed assets of an enterprise fund should be accounted for in the

a. General fixed asset account group but no depreciation on the fixed assets should be recorded.

b. General fixed asset account group and depreciation on the fixed assets should be recorded.

c. Enterprise fund but no depreciation on the fixed assets should be recorded.

d. Enterprise fund and depreciation on the fixed assets should be recorded.

74. Which of the following accounts could be included in the balance sheet of an enterprise fund?

<table>
<thead>
<tr>
<th>Reserve for encumbrances</th>
<th>Revenue bonds payable</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

75. Which of the following fund types should account for fixed assets in a manner similar to a "for profit" organization?

a. Special revenue fund.

b. Capital projects fund.

c. General fixed assets account group.

d. Enterprise fund.

76. How would customers' security deposits which can not be spent for normal operation purposes be classified in the balance sheet of the enterprise fund of a governmental unit?

- Restricted fund: Asset = Yes, Liability = No, Equity = Yes
- Long-term debt account group: Enterprise fund = No, Yes

77. What amount should be accounted for in the enterprise fund of a governmental unit?

a. No

b. No

c. Yes

d. Yes

**Internal Service Fund**

78. The billings for transportation services provided to other governmental units are recorded by the internal service fund as

a. Interfund exchanges.

b. Intergovernmental transfers.

c. Transportation appropriations.

d. Operating revenues.

79. Lake City operates a centralized data processing center through an internal service fund, to provide data processing services to Lake's other governmental units. In Year 6, this internal service fund billed Lake's water and sewer fund $100,000 for data processing services. How should the internal service fund record this billing?
a. Memorandum entry only -- --
b. Due from water and sewer fund $100,000
   Data processing department expenses $100,000
c. Intergovernmental transfers $100,000
   Interfund exchanges $100,000
d. Due from water and sewer fund $100,000
   Operating revenues control $100,000

80. Gem City’s internal service fund received a residual equity transfer of $50,000 cash from the general fund. This $50,000 transfer should be reported in Gem’s internal service fund as a credit to
a. Revenues.
b. Other financing sources.
c. Accounts payable.
d. Contributed capital.

81. Through an internal service fund, Wood County operates a centralized data processing center to provide services to Wood’s other governmental units. In Year 5, this internal service fund billed Wood’s parks and recreation fund $75,000 for data processing services. What account should Wood’s internal service fund credit to record this $75,000 billing to the parks and recreation fund?
   a. Operating revenues control
   b. Interfund exchanges
   c. Intergovernmental transfers
   d. Data processing department expenses

82. Bay Creek’s municipal motor pool maintains all city-owned vehicles and charges the various departments for the cost of rendering those services. In which of the following funds should Bay account for the cost of such maintenance?
   a. General fund.
b. Internet service fund.
c. Special revenue fund.
d. Special assessment fund.

83. Which capitalized assets must be depreciated in government-wide financial statements?
   a. All infrastructure assets
   b. All capitalized collections of art
   c. All capitalized collections that are exhaustible
   d. All collections of historical treasures

84. Infrastructure assets using the modified approach are:
   a. Reported in the balance sheet for governmental funds.
b. Reported in government-wide statements at historical costs less accumulated depreciation.
c. Not depreciated
d. Reported in the fixed asset group of accounts.

85. When the lease is recorded on January 1, Year 4, which accounts are credited?
   Fund-Based Statements Government-Wide Statements
   a. Other fin. sources $69,000 Capital Lease Obligation $69,000
   b. Lease Payable $69,000 Other Financing Sources $69,000
c. Other financing uses $10,000 Capital Lease Liability $10,000
d. No Entry Capital Lease Liability $10,000

86. What accounts are debited on January 1, Year 4?
   Fund-Based Statements Government-Wide Statements
   a. Expenditures–leased asset $69,000 Property-capital lease $69,000
   b. No Entry Property-capital lease
   c. Other financing uses $10,000 Other financing uses $10,000
d. No Entry No Entry

15Q-10
87. What amount of depreciation would be recorded at December 31, Year 4 assuming straight-line depreciation is used?

<table>
<thead>
<tr>
<th>Fund-Based Statements</th>
<th>Government-Wide Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No Entry</td>
<td>No Entry</td>
</tr>
<tr>
<td>b. $7,667</td>
<td>$7,667</td>
</tr>
<tr>
<td>c. No Entry</td>
<td>$6,900</td>
</tr>
<tr>
<td>d. No Entry</td>
<td>$7,667</td>
</tr>
</tbody>
</table>

88. The interest for Year 4 would be recorded as a debit of:

<table>
<thead>
<tr>
<th>Fund-Based Statements</th>
<th>Government-Wide Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Interest Expense</td>
<td>$6,900</td>
</tr>
<tr>
<td>b. Expenditures-Interest</td>
<td>$6,900</td>
</tr>
<tr>
<td>c. No Entry</td>
<td>Interest Expense $7,667</td>
</tr>
<tr>
<td>d. No Entry</td>
<td>Interest Expense $6,900</td>
</tr>
</tbody>
</table>

89. At December 31, Year 4, how would the 1st payment of $10,000 affect the lease obligation?

<table>
<thead>
<tr>
<th>Fund-Based Statements</th>
<th>Government-Wide Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No Effect</td>
<td>No Effect</td>
</tr>
<tr>
<td>b. Debit Other Fin. Uses</td>
<td>$10,000</td>
</tr>
<tr>
<td>c. Debit Other Fin. Uses</td>
<td>$3,100</td>
</tr>
<tr>
<td>d. Debit Other Fin. Uses</td>
<td>$3,100</td>
</tr>
</tbody>
</table>

Solid Waste Landfill

Items 90 – 92 are based of the following information:

ABC City opens a landfill in year one that is expected to take 10 years to fill. Currently, the city expects a total of $1,000,000 in closure costs and $500,000 in post-closure cost. During year one, the city makes an initial payment of $40,000 on the closure cost and the landfill is 8% full.

90. Assume that the landfill is part of the general fund, what account and amount would be debited for the landfill cost for year one using fund-based reporting?

| a. Expense-landfill closure cost | $ 40,000 |
| b. Expenditures – landfill closure cost | $ 40,000 |
| c. Expense-landfill closure cost | $120,000  |
| d. Expenditures-landfill closure cost | $120,000  |

91. Assuming that the landfill cost is being reported on government-wide financial statements, what account and amount would be debited for the cost of the landfill for year one?

| a. Expense-landfill closure cost | $ 40,000 |
| b. Expenditures – landfill closure cost | $ 40,000 |
| c. Expense-landfill closure cost | $120,000  |
| d. Expenditures-landfill closure cost | $120,000  |

92. Assume that the landfill cost is being reported on government-wide financial statements, what account and amount would be debited to record the initial payment on the closure cost?

| a. Asset-landfill | $40,000 |
| b. Asset-landfill | $120,000 |
| c. Landfill closure liability | $40,000 |
| d. Other financing uses-landfill | $40,000 |

Major Funds and Criteria

93. Under SGAS 34, the focus of certain fund financial statements is on major funds. Major funds include:

a. the main operating fund (General Fund)

b. the Special Revenue Fund
c. all funds meeting SGAS 34’s quantitative criteria.
d. A & C

94. Under SGAS 34, a special revenue fund may be reported as a major fund if:

a. Total liabilities of the fund are 10% of the total liabilities of all government funds and 5% of the total liabilities of all governmental and enterprise funds combined.

b. Total revenues of the fund are 5% of the total revenues of all governmental funds and 10% of the total revenues of all governmental and enterprise funds combined.

c. Total assets of the fund are 10% of the total assets of all governmental funds and 5% of the assets for all governmental funds and the internal service fund combined.

d. Total expenditures of the fund are 10% of the total expenditures of all governmental funds and 5% of the expenditures for all the governmental funds and the permanent funds combined.

95. SGAS 34 states that any fund may be reported as major if:

a. Total assets of that fund are 5% of the total assets of all governmental funds and 2% of the total assets of all governmental and enterprise funds combined.

b. Total expenditures of that fund are 10% of the total expenditures of all governmental funds and 2% of the total expenditures of all governmental and enterprise funds combined.

c. Total revenues of that fund are 6% of the total revenues of all governmental funds and 3% of the total revenues of all governmental and enterprise funds combined.

d. The government determines that a governmental fund or an enterprise fund is particularly important to its users and based on its judgement should be reported as a major fund.
FINANCIAL STATEMENTS

96. SGAS 34 requires that proprietary funds present which of the following statements?
a. Statement of Activities
b. Statement of Cash Flows (indirect method)
c. Statement of Revenues, Expenditures and Changes in Fund Balances.
d. Statement of Cash Flows (direct method)

97. Under SGAS 34, which financial statements must be presented for governmental funds?
a. A financial statement in balance sheet format.
b. A statement of cash flows
c. A statement of activities
d. A statement of revenues, expenses and changes in fund balances.

98. SGAS 34 requires that a statement of revenues, expenditures, and changes in fund balances be reported for governmental funds. In that statement:
a. Revenues are classified by function.
b. Proceeds from the issue of long-term bonds should be reported in the other financing sources and uses section.
c. Expenditures are classified by source.
d. Other financing sources—transfers are classified as revenues.

99. With regard to the statement of cash flows for a governmental unit’s enterprise fund, items generally presented as cash equivalents are:

<table>
<thead>
<tr>
<th>2-month certificates</th>
<th>3 month certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td>treasury bills</td>
<td>of deposit</td>
</tr>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

100. SGAS 34 requires that general capital assets and general long-term liabilities be reported on:
a. governmental funds balance sheet
b. special revenue funds balance sheet
c. statement of net assets in the governmental activities column
d. fixed assets and long-term debt group of accounts.

101. Preparation of government-wide financial statements requires the elimination from fund-based statements of:
a. due from general fund and due to special revenue fund accounts.
b. other financing sources accounts – transfers in
c. other financing uses accounts – transfers out
d. all the above

102. SGAS 34 requires that the statement of net assets:
a. Report assets classified into current and non-current categories.
b. Display net assets in three categories.
c. Report liabilities classified in current and non-current categories.
d. Use a balance sheet format.

103. The restricted net assets account reported in the net asset section of the Statement of Net Assets.
a. Includes capital assets restricted by external entities or by law (constitutional provisions or enabling legislation.)
b. May include expendable but not non-expendable endowments.
c. Are included in the combined net assets section of the Statement of Net Assets.
d. May include non-expendable but not expendable endowments.

104. Expenses reported on government-wide financial statements are classified by:
a. character
b. function
c. object
d. department

105. In the Statement of Activities of government-wide financial statements, property taxes are shown as:
a. general revenues
b. program revenues
c. charges for services
d. imposed non-exchange revenues

15Q-12
106. In government-wide statement of activities, special items are transactions or other events that are:
   a. unusual in nature and infrequent in occurrence
   b. unusual in nature and infrequent in occurrence and within management’s control
   c. unusual in nature or infrequent in occurrence and within management’s control
   d. unusual in nature or infrequent in occurrence and not within management’s control

107. Which category of funds is not reported in government-wide financial statements?
   a. governmental funds
   b. enterprise funds
   c. proprietary funds
   d. fiduciary funds

108. According to SGAS 34, notes to the financial statements:
   a. Are an integral part of the financial statements because they present information essential to fair presentation that is not reported on the face of the financial statements.
   b. Are a part of the required supplemental information (RSI).
   c. Are a part of the management’s discussion and analysis.
   d. Give equal focus to the primary government and its component units.

109. SGAS 34 requires budgetary comparison schedules:
   a. Be presented for each of the governmental funds
   b. Compare actual amounts with only the final budget.
   c. Be presented for the general fund and each special revenue fund with a legally adopted budget.
   d. Be presented for the government-wide financial statements.

110. SGAS 34 requires that budgetary comparison schedules:
   a. Be presented as a part of management’s discussion and analysis.
   b. Be presented as a part of the required supplemental information.
   c. Be presented for all governmental funds
   d. Be presented for the enterprise fund.

111. According to SGAS 34, a summary reconciliation of government-wide and fund-based financial statements:
   a. Must be presented at the bottom of the fund-based statements or in an accompanying schedule.
   b. Is not required by SGAS 34, but is recommended.
   c. Must be presented in the notes to the financial statements.
   d. Must be presented in the required supplemental information.

**SGAS 33: NON-EXCHANGE TRANSACTIONS**

112. On January 1, Year 4, Greensboro City levied property taxes for the fiscal year ending December 31, Year 4. According to SGAS 33, “Accounting and Financial Reporting for Non-exchange Transactions”, property taxes are an example of what type of non-exchange transaction?
   a. Derived.
   b. Government mandated.
   c. Imposed.
   d. Voluntary.

113. For the year ended December 31, Year 4, Winston City reported the following revenues:
   - Property taxes $200,000
   - Liquor Licenses $20,000
   - Sales taxes $40,000
   - Fines $10,000

   Under SGAS 33, what is the amount of revenues that came from imposed nonexchange transactions?
   a. $270,000.
   b. $230,000.
   c. $240,000
   d. $200,000.

114. In SGAS 33, which of the following revenues are not derived from underlying transactions?
   a. Fines.
   b. Income taxes.
   c. Sales taxes.
   d. Motor fuel taxes
REVIEW QUESTIONS: SGAS 34

115. Government-wide Statement of Net Assets
   a. Uses a separate column to distinguish between government and business type activities.
   b. Uses a separate column for each type of fund; governmental, proprietary and fiduciary funds.
   c. Focuses on governmental funds only
   d. Uses separate columns for all funds and account groups

116. Government-wide financial statements use which of the following concepts?
    a. No Yes Yes No
    b. No No No No
    c. Yes No Yes No
    d. Yes No No Yes

117. According to SGAS 34, Management’s Discussion Analysis includes:
   a. A budgetary comparison of the actual vs budget financial statements for the general fund and the enterprise funds.
   b. A description of currently known facts, decisions, or conditions expected to have significant effects on financial activities.
   c. Appears after the notes to the financial statements at the end of the financial report.
   d. Is no longer required for governmental financial reports.

118. Government-wide statement of net assets reports capital assets
   a. At estimated fair value.
   b. As part of the fixed asset group.
   c. In the statement of capital assets.
   d. At historical costs including any capitalized interest.

119. Which of the following is not an example of infrastructure asset of a State or Local Government?
   a. Sewer system
   b. Buildings
   c. Roads
   d. Bridges

120. The government-wide statement of activities reports
   a. Only the activities of the proprietary funds using the economic resources measurement focus and accrual accounting.
   b. Includes the fiduciary funds using the economic resources measurement focus and accrual accounting.
   c. By function the expenses minus program revenues and net revenue or net expenses.
   d. Includes by function the expenses minus the revenues for the fixed assets and the long-term debt groups.

121. The government-wide statement of activities should report the following categories of program revenues:
    I. Charges for services.
    II. Capital grants and contributions
    III. General property taxes.
    IV. Property taxes levied for debt service.
    a. I only.
    b. I, II.
    c. I, II, III
    d. I, II, III, IV

122. In accordance with SGAS 34, governmental funds include which of the following?
    a. Internal service funds.
    b. Investment trust funds.
    c. Permanent funds.
    d. Private-purpose trust funds.

123. According to SGAS 34, the focus of governmental funds should be:
    a. Yes Yes No
    b. No Yes Yes
    c. Yes No No
    d. No No Yes

124. Under SGAS 34, which of the following funds is considered a fiduciary fund?
    a. Non-expendable trust fund.
    b. Expendable trust fund.
    c. Private purpose agency fund.
    d. Investment Trust Fund.
125. According to SGAS 34, a summary reconciliation of the government-wide and fund financial statements,
   a. Is not required.
   b. Must accompany the notes to the financial statements.
   c. Must be presented at the bottom of the fund statements or in an accompanying schedule.
   d. Must be presented as a part of the management’s discussion analysis.

126. Under SGAS 34, capital assets and non-current debt are reported in the
   a. Governmental-wide statement of net assets.
   b. Fixed asset and long-term debt group of accounts.
   c. Governmental funds balance sheet
   d. No longer reported under SGAS 34.

127. In accordance with SGAS 34, governmental funds should report the following financial statements:
   I. Income statement
   II. Statement of activities
   III. Statement of revenues expenses and changes in net assets.
   IV. A statement of net assets
   V. Balance sheet
   a. I, IV
   b. V, II, IV
   c. III, IV
   d. V

128. SGAS 34 requires budgetary comparison schedules
   a. Be reported for the general fund and each major special revenue fund with a legally adopted budget.
   b. Be reported for all proprietary funds.
   c. Be reported for the permanent funds
   d. Should not be reported.

129. Under SGAS 34, account groups for general fixed assets and general long-term debt are reported on which of the following financial statements?

<table>
<thead>
<tr>
<th>Government-wide Statement of Net Assets</th>
<th>Balance Sheet Proprietary Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>Yes</td>
</tr>
<tr>
<td>b. No</td>
<td>No</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

130. Under SGAS 33, which of the following revenues would be considered a government-mandated nonexchange transaction?
   a. Governmental imposed fines.
   b. State specifies that a city must create a homeless shelter and then provides a grant to help defray the cost.
   c. State provides a grant to a city to improve the reading programs in its schools.
   d. Sales taxes.

131. In accordance with SGAS 34, depreciation would be recorded on which of the following financial statements?

<table>
<thead>
<tr>
<th>Governmental Funds</th>
<th>Statement of Revenues, Expenses and Changes in Fund Net Assets for Proprietary Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

132. Fiduciary trust funds include:
   a. Expendable-trust funds.
   b. Private purpose trust funds
   c. Permanent funds
   d. Non-expendable trust funds

133. According to SGAS 34, Agency Funds:
   a. are governmental funds
   b. are proprietary funds
   c. are permanent funds
   d. are fiduciary funds in which the assets should equal the liabilities in the statement of fiduciary net assets.

134. Eureka City should issue a statement of cash flows for which of the following funds?

<table>
<thead>
<tr>
<th>Eureka City Hall capital projects fund</th>
<th>Eureka Water Enterprise fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>Yes</td>
</tr>
<tr>
<td>b. No</td>
<td>No</td>
</tr>
<tr>
<td>c. Yes</td>
<td>No</td>
</tr>
<tr>
<td>d. Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
135. The following transactions were among those reported by Cliff County’s water and sewer enterprise fund for Year 4:

Proceeds from sale of revenue bonds $5,000,000
Cash received from customer households 3,000,000
Capital contributed by subdividers 1,000,000

In the water and sewer enterprise fund’s statement of cash flows for the year ended December 31, Year 4, what amount should be reported as cash flows from capital and related financing activities?

a. $9,000,000
b. $8,000,000
c. $6,000,000
d. $5,000,000

**REVIEW QUESTIONS**

**FOR FUND-BASED REPORTING**

136. A state governmental unit should use which basis of accounting for each of the following types of funds?

<table>
<thead>
<tr>
<th>Governmental</th>
<th>Proprietary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>Modified accrual</td>
</tr>
<tr>
<td>Modified accrual</td>
<td>Modified accrual</td>
</tr>
<tr>
<td>Accrual</td>
<td>Accrual</td>
</tr>
</tbody>
</table>

137. When the budget of a governmental unit, for which the estimated revenues exceed the appropriations, is adopted and recorded in the general ledger at the beginning of the year, the budgetary fund balance account is

a. Credited at the beginning of the year and no entry made at the end of the year.
b. Credited at the beginning of the year and debited at the end of the year.
c. Debited at the beginning of the year and no entry made at the end of the year.
d. Debited at the beginning of the year and credited at the end of the year.

138. Cal City maintains several major fund types. The following were among Cal's cash receipts during Year 6:

Unrestricted state grant $1,000,000
Interest on bank accounts held for employees' pension plan 200,000

What amount of these cash receipts should be accounted for in Cal's general fund?

a. $1,200,000.
b. $1,000,000.
c. $200,000.
d. $0.

139. The modified accrual basis of accounting is appropriate for which of the following fund categories of a county government?

<table>
<thead>
<tr>
<th>Governmental</th>
<th>Proprietary</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

140. For the budgetary year ending December 31, Year 6, Maple City's general fund expects the following inflows of resources:

<table>
<thead>
<tr>
<th>Source of Inflow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property taxes, licenses, and fines</td>
</tr>
<tr>
<td>Proceeds of debt issue</td>
</tr>
<tr>
<td>Interfund transfers for debt service</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$9,000,000</td>
</tr>
<tr>
<td>5,000,000</td>
</tr>
<tr>
<td>1,000,000</td>
</tr>
</tbody>
</table>

In the budgetary entry, what amount should Maple record for estimated revenues?

a. $9,000,000.
b. $10,000,000.
c. $14,000,000.
d. $15,000,000.

**Items 141 and 142** are based on the following:

Ridge Township's governing body adopted its general fund budget for the year ended July 31, Year 4, comprised of estimated revenues of $100,000 and appropriations of $80,000. Ridge formally integrates its budget into the accounting records.

141. To record the appropriations of $80,000, Ridge should

a. Credit appropriations control.
b. Debit appropriations control.
c. Credit estimated expenditures control.
d. Debit estimated expenditures control.

142. To record the $20,000 budgeted excess of estimated revenues over appropriations, Ridge should

a. Credit estimated excess revenues control.
b. Debit estimated excess revenues control.
c. Credit budgetary fund balance.
d. Debit budgetary fund balance.
143. The revenues control account of a governmental unit is debited when
a. The budget is recorded at the beginning of the year.
b. The account is closed out at the end of the year.
c. Property taxes are recorded.
d. Property taxes are collected.

144. For which of the following governmental entities that use proprietary fund accounting should a statement of cash flows be presented?

<table>
<thead>
<tr>
<th>Public benefit corporations</th>
<th>Governmental utilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

145. The appropriations control account of a governmental unit is debited when
a. Supplies are purchased.
b. Expenditures are recorded.
c. The budgetary accounts are closed.
d. The budget is recorded.

146. During Year 6, Pine City recorded the following receipts from self-sustaining activities paid for by users of the services rendered:

| Municipal bus system          | $1,000,000 |
| Operation of water supply     |            |
| and sewerage plant            | $1,800,000 |

What amount should be accounted for in Pine's enterprise funds?

a. $2,800,000
b. $1,800,000
c. $1,000,000
d. $0

147. Customers' security deposits that cannot be spent for normal operating purposes were collected by a governmental unit and accounted for in the enterprise fund. A portion of the amount collected was invested in marketable securities. How would the portion in cash and the portion in marketable securities be classified in the balance sheet of the enterprise fund?

<table>
<thead>
<tr>
<th>Portion in cash</th>
<th>Portion in marketable securities</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Restricted asset</td>
<td>Restricted asset</td>
</tr>
<tr>
<td>b. Restricted asset</td>
<td>Unrestricted asset</td>
</tr>
<tr>
<td>c. Unrestricted asset</td>
<td>Unrestricted asset</td>
</tr>
<tr>
<td>d. Unrestricted asset</td>
<td>Restricted asset</td>
</tr>
</tbody>
</table>

148. Lake City incurred $300,000 of salaries and wages expense in its general fund for the month ended May 31, Year 6. For this $300,000 expense, Lake should debit
a. Fund balance—unreserved, undesignated.
b. Encumbrances control.
c. Appropriations control.
d. Expenditures control.

149. The following revenues were among those reported by Ariba Township in Year 6:

- Net rental revenue (after depreciation) from a parking garage owned by Ariba: $40,000
- Interest earned on investments held for employees' retirement benefits: $100,000
- Property taxes: $6,000,000

What amount of the foregoing revenues should be accounted for in Ariba's governmental-type funds?

a. $6,140,000
b. $6,100,000
c. $6,040,000
d. $6,000,000

150. Powell City purchased a piece of equipment to be used by a department financed by the general fund. How should Powell report the acquisition in the general fund?

a. As an expenditure
b. Capitalize, depreciation is optional
c. Capitalize, depreciation is required
d. Capitalize, depreciation is not permitted

151. For governmental units, depreciation expense on assets acquired with capital grants externally restricted for capital acquisitions should be reported in which type of fund?

<table>
<thead>
<tr>
<th>Governmental fund</th>
<th>Proprietary fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
</tr>
<tr>
<td>d. No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
152. The following equity balances are among those maintained by Cole City:

<table>
<thead>
<tr>
<th>Fund Type</th>
<th>Equity Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise funds</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Internal service funds</td>
<td>400,000</td>
</tr>
</tbody>
</table>

Cole's proprietary equity balances amount to
a. $1,400,000.
b. $1,000,000.
c. $400,000.
d. $0.

Items 153 and 154 are based on the following:

On December 31, Year 6, Vane City paid a contractor $3,000,000 for the total cost of a new municipal annex built in Year 6 on city-owned land. Financing was provided by a $2,000,000 general obligation bond issue sold at face amount on December 31, Year 6, with the remaining $1,000,000 transferred from the general fund.

153. What account and amount should be reported in Vane's Year 6 financial statements for the general fund?
   a. Other financing uses control, $1,000,000.
   b. Other financing sources control, $2,000,000.
   c. Expenditure control, $3,000,000.
   d. Other financing sources control, $3,000,000.

154. What accounts and amounts should be reported in Vane's Year 6 financial statements for the capital projects fund?
   a. Other financing source control, $2,000,000; General long-term debt, $2,000,000.
   b. Revenues control, $2,000,000; Expenditures control, $2,000,000.
   c. Other financing sources control, $3,000,000; Expenditures control, $3,000,000.
   d. Revenues control, $3,000,000; Expenditures control, $3,000,000.

155. Kew City received a $15,000,000 federal grant to finance the construction of a center for rehabilitation of drug addicts. The proceeds of this grant should be accounted for in the
   a. Special revenue funds.
   b. General fund.
   c. Capital projects funds.
   d. Trust funds.

156. The following information pertains to Pine City's general fund for Year 4:

<table>
<thead>
<tr>
<th>Account Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriations</td>
<td>$6,500,000</td>
</tr>
<tr>
<td>Expenditures</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Other financing sources</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Other financing uses</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Revenues</td>
<td>8,000,000</td>
</tr>
</tbody>
</table>

After Pine's general fund accounts were closed at the end of 20X9, the fund balance increased by
a. $3,000,000
b. $2,500,000
c. $1,500,000
d. $1,000,000

157. All of the following statements regarding notes to the basic financial statements of governmental entities are true except
   a. The notes contain disclosures related to required supplementary information.
   b. Some notes presented by governments are identical to notes presented in business financial statements.
   c. Notes that are considered essential to the basic financial statements need to be presented.
   d. It is acceptable to present notes in a very extensive format.

158. The appropriations control account of a governmental unit is credited when
   a. Supplies are purchased.
   b. Expenditures are recorded.
   c. The budget is recorded.
   d. The budgetary accounts are closed.

159. The estimated revenues control account balance of a governmental fund type is eliminated when
   a. The budgetary accounts are closed.
   b. The budget is recorded.
   c. Property taxes are recorded.
   d. Appropriations are closed.

160. Fixed assets donated to a governmental unit should be recorded
   a. As a memorandum entry only.
   b. At the donor's carrying amount.
   c. At estimated fair value when received.
   d. At the lower of donor's carrying amount or estimated fair value when received.
161. Which of the following funds of a governmental unit uses the modified accrual basis of accounting?
   a. Enterprise funds.
   b. Internal service funds.
   c. Nonexpendable trust funds.
   d. Special revenue funds.

162. In Year 4, a state government collected income taxes of $8,000,000 for the benefit of one of its cities that imposes an income tax on its residents. The state remitted these collections periodically to the city. The state should account for the $8,000,000 in the
   a. General fund.
   b. Agency funds.
   c. Internal service funds.
   d. Special revenue funds.

163. Which of the following funds of a governmental unit uses the same basis of accounting as an enterprise fund?
   a. Special revenue.
   b. Expendable trust.
   c. Capital projects.
   d. Internal service.

164. Customers' security deposits that cannot be spent for normal operating purposes were collected by a governmental unit and accounted for in the enterprise fund. A portion of the amount collected was invested in marketable debt securities and a portion in marketable equity securities. How would each portion be classified in the balance sheet?

| Portion in | Portion in |
| marketable debt securities | marketable equity securities |
| a. Unrestricted asset | Restricted asset |
| b. Unrestricted asset | Unrestricted asset |
| c. Restricted asset | Unrestricted asset |
| d. Restricted asset | Restricted asset |

165. Which of the following accounts of a governmental unit is debited when a purchase order is approved?
   a. Appropriations control.
   b. Vouchers payable.
   c. Fund balance reserved for encumbrances.
   d. Encumbrances control.

166. A budgetary fund balance reserved for encumbrances in excess of a balance of encumbrances indicates
   a. An excess of vouchers payable over encumbrances.
   b. An excess of purchase orders over invoices received.
   c. An excess of appropriations over encumbrances.
   d. A recording error.

167. Gold County received goods that had been approved for purchase but for which payment had not yet been made. Should the accounts listed below be increased?

| Encumbrances | Expenditures |
| a. No | No |
| b. No | Yes |
| c. Yes | No |
| d. Yes | Yes |

168. Kingsford City incurred $100,000 of salaries and wages for the month ended March 31, Year 6. How should this be recorded at that date?

| Dr. | Cr. |
| Expenditures -- | vouchers payable |
| a. salaries and wages | $100,000 |
| b. Salaries and wages expense | $100,000 |
| c. Encumbrances -- | vouchers payable |
| d. Fund balance | $100,000 |

169. The debt service fund of a governmental unit is used to account for the accumulation of resources to pay, and the payment of, general long-term debt

| Principal | Interest |
| a. Yes | Yes |
| b. Yes | No |
| c. No | No |
| d. No | Yes |

170. The following information pertains to Wood Township's long-term debt:

Cash accumulations to cover payment of principal and interest on

- General long-term obligations $350,000
- Proprietary fund obligations $100,000

How much of these cash accumulations should be accounted for in Wood's debt service funds?

| a. $0 |
| b. $100,000 |
| c. $350,000 |
| d. $450,000 |
171. Albee Township’s fiscal year ends on June 30. Albee uses encumbrance accounting. On April 5, Year 4, an approved $1,000 purchase order was issued for supplies. Albee received these supplies on May 2, Year 4, and the $1,000 invoice was approved for payment. What journal entry should Albee make on April 5, Year 4, to record the approved purchase order?

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Memorandum entry only</td>
<td>--</td>
</tr>
<tr>
<td>b. Encumbrances control $1,000</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Fund balance reserved</td>
</tr>
<tr>
<td></td>
<td>for encumbrances $1,000</td>
</tr>
<tr>
<td>c. Supplies 1,000</td>
<td>Vouchers payable 1,000</td>
</tr>
<tr>
<td>d. Encumbrances control 1,000</td>
<td>Appropriations control 1,000</td>
</tr>
</tbody>
</table>

172. On December 31, Year 5, Park Township paid a contractor $4,000,000 for the total cost of a new police building built in Year 5. Financing was by means of a $3,000,000 general obligation bond issue sold at face amount on December 31, Year 5, with the remaining $1,000,000 transferred from the general fund. What amount should Park record as revenues in the capital projects fund in connection with the bond issue proceeds and the transfer?

| a. $0                      |
| b. $1,000,000               |
| c. $3,000,000               |
| d. $4,000,000               |

173. On March 1, Wag City issued $1,000,000, ten-year, 6% general obligation bonds at par with no bond issue costs. The bonds pay interest September 1 and March 1. What amount of interest expense and bond interest payable should Wag report in its government-wide financial statements at the close of the fiscal year on December 31?

| a. Interest expense, $50,000; interest payable $20,000. |
| b. Interest expense, $50,000; interest payable, $0. |
| c. Interest expense, $60,000; interest payable $10,000. |
| d. Interest expense, $30,000; interest payable, $0. |

174. The following information for the year ended June 30, Year 6, pertains to a proprietary fund established by Burwood Village in connection with Burwood’s public parking facilities:

Receipts from users of parking facilities $400,000
Expenditures
- Parking meters 210,000
- Salaries and other cash expenses 90,000
- Depreciation of parking meters 70,000

For the year ended June 30, Year 6, this proprietary fund should report net income of

| a. $0          |
| b. $30,000     |
| c. $100,000    |
| d. $240,000    |

175. Hill city’s water utility fund held the following investments in U.S. Treasury securities at June 30, Year 4.

<table>
<thead>
<tr>
<th>Investment</th>
<th>Date purchased</th>
<th>Maturity date</th>
<th>Carrying amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-month T-bill</td>
<td>5/31/Year 4</td>
<td>7/31/Year 4</td>
<td>$30,000</td>
</tr>
<tr>
<td>3-year T-note</td>
<td>6/15/Year 4</td>
<td>8/31/Year 4</td>
<td>50,000</td>
</tr>
<tr>
<td>5-year T-note</td>
<td>10/1/Year 0</td>
<td>9/30/Year 5</td>
<td>100,000</td>
</tr>
</tbody>
</table>

In the fund’s balance sheet, what amount of these investments should be reported as cash and cash equivalents at June 30, Year 4.

| a. $0          |
| b. $30,000     |
| c. $80,000     |
| d. $180,000    |

176. An unrestricted grant received from another government to support enterprise fund operations should be reported as

| a. Contributed capital |
| b. Nonoperating revenues |
| c. Operating revenues |
| d. Revenues and expenditures |

177. A city taxes merchants for various central district improvements. Which of the following accounting methods assist(s) in assuring that these revenues are expended legally?

<table>
<thead>
<tr>
<th>Fund accounting</th>
<th>Budgetary accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
</tr>
<tr>
<td>d. Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

178. A state had general obligation bonds outstanding that required payment of interest on July 1 and January 1 of each year. State law allowed for the General fund to make debt payments without the use of a fiscal agent. The fiscal year ended June 30. Which of the following accounts would have decreased when the state paid the interest due on July 17?

| a. Interest expenditures |
| b. Interest payable |
| c. Interest expense |
| d. Fund balance |

Recently Released Question

178. A state had general obligation bonds outstanding that required payment of interest on July 1 and January 1 of each year. State law allowed for the General fund to make debt payments without the use of a fiscal agent. The fiscal year ended June 30. Which of the following accounts would have decreased when the state paid the interest due on July 17?

| a. Interest expenditures |
| b. Interest payable |
| c. Interest expense |
| d. Fund balance |

15Q-20
179. A capital projects fund for a new city courthouse recorded a receivable of $300,000 for a state grant and a $450,000 transfer from the general fund. What amount should be reported as revenue by the capital projects fund?
   a. $0
   b. $300,000
   c. $450,000
   d. $750,000

180. Which of the following is a required financial statement for an investment trust fund?
   a. Statement of revenues, expenditures, and changes in fiduciary net assets.
   b. Statement of activities.
   c. Statement of revenues, expenses, and changes in fiduciary net assets.
   d. Statement of changes in fiduciary net assets.

181. Assuming no outstanding encumbrances at year end, closing entries for which of the following situations would increase the unreserved fund balance at year end?
   a. Actual revenues were less than estimated revenues.
   b. Estimated revenues exceed actual appropriations.
   c. Actual expenditures exceed appropriations.
   d. Appropriations exceed actual expenditures.

182. Which of the following would be reported as program revenues on a local government’s government-wide statement of activities?
   a. Charges for services.
   b. Taxes levied for a specific function.
   c. Proceeds from the sale of a capital asset used for a specific function.
   d. Interest revenues.

183. Which format must an enterprise fund use to report cash flow operating activities in the statement of cash flows?
   a. Indirect method, beginning with operating income.
   b. Indirect method, beginning with change in net assets.
   c. Direct method.
   d. Either direct or indirect method.

184. Nack City received a donation of a valuable painting. Nack planned to add the painting to its collection and display it in the protected exhibition area of city hall. Nack had a policy that if such donated art works were sold, the proceeds would be used to acquire other items for its collections. Which of the following would be correct regarding the donated painting?
   a. Must be capitalized and depreciated.
   b. Must be capitalized but not depreciated.
   c. May be capitalized, but it is not required, and it must be depreciated.
   d. May be capitalized, but it is not required, and depreciation is not required.

185. During the current year, Wythe County levied $2,000,000 property taxes, 1% of which is expected to be uncollectible. During the year, the county collected $1,800,000 and wrote off $15,000 as uncollectible. What amount should Wythe County report as property tax revenue in its government-wide statement of activities for the current year?
   a. $1,800,000
   b. $1,980,000
   c. $1,985,000
   d. $2,000,000

186. Harland County received a $2,000,000 capital grant to be equally distributed among its five municipalities. The grant is to finance the construction of capital assets. Harland had no administrative or direct financial involvement in the construction. In which fund should Harland record the receipt of cash?
   a. Agency fund
   b. General fund.
   c. Special revenue fund.
   d. Private purpose trust fund.

187. Which of the following funds should be reported as part of local government’s governmental activities column in its government-wide statements?
   a. Debt service
   b. Agency
   c. Private-purpose trust.
   d. Pension trust.

188. A nongovernmental not-for-profit organization's statement of activities is similar to which of the following for-profit financial statements?
   b. Statement of cash flows.
   c. Statement of retained earnings.
   d. Income statement.
Chapter Fifteen
Governmental Accounting Problems

NUMBER 1

Number 1 consists of 39 items. Select the best answer for each item for fund-based accounting.

The Wayne City Council approved and adopted its budget for Year 3. The budget contained the following amounts:

- Estimated revenues: $700,000
- Appropriations: 660,000
- Authorized operating transfer to the Library debt service fund: 30,000

During 20X3, various transactions and events occurred which affected the general fund.

Required:

For items 1 through 39, select whether the item should be debited, should be credited, or is not affected.

Items 1 through 5 involve recording the adopted budget in the general fund.

1. Estimated revenues
2. Budgetary fund balance
3. Appropriations
4. Appropriations - Operating transfers out
5. Expenditures

Items 6 through 10 involve recording the Year 3 property tax levy in the general fund. It was estimated that $5,000 would be uncollectible.

6. Property tax receivable.
7. Bad debt expense.
8. Allowance for uncollectibles - current.
10. Estimated revenues.

Items 11 through 15 involve recording, in the general fund, encumbrances at the time purchase orders are issued.

11. Encumbrances.
15. Purchases.

Items 16 through 20 involve recording, in the general fund, expenditures which had been previously encumbered in the current year.

17. Budgetary fund balance reserved for encumbrances.
18. Expenditures.
19. Vouchers payable.
20. Purchases.
Items 21 through 25 involve recording, in the general fund, the operating transfer of $30,000 made to the Library debt service fund. (No previous entries were made regarding this transaction.)

21. Residual equity transfer out.
22. Due from Library debt service fund.
23. Cash.
24. Other financial uses - operating transfers out.
25. Encumbrances.

Items 26 through 35 involve recording, in the general fund, the closing entries (other than encumbrances) for Year 3.

27. Budgetary fund balance.
29. Appropriations - Operating transfers out.
30. Expenditures.
31. Revenues.
32. Other financial uses - Operating transfers out.
33. Allowance for uncollectibles - current.
34. Bad debt expense.
35. Depreciation expense.

Items 36 through 39 involve recording, in the general fund, the closing entry relating to the $12,000 of outstanding encumbrances at the end of Year 3 and an adjusting entry to reflect the intent to honor these commitments in Year 4.

36. Encumbrances.
37. Budgetary fund balance reserved for encumbrances.
39. Fund balance reserved for encumbrances.

Instructions: Rework the problem using the government-wide reporting approach.

**NUMBER 2**

This problem consists of 20 items relating to a municipal government. Answer all items for fund-based reporting.

Items 1 through 10, in the left-hand column, represent various transactions pertaining to a municipality that uses encumbrance accounting. To the right of these items is a listing of possible ways to record the transactions. Items 11 through 20, also listed in the left-hand column, represent the funds, accounts, and account groups used by the municipality. To the right of these items is a list of possible accounting and reporting methods.

**Required:**
a. For each of the municipality’s transactions (items 1 through 10), select the appropriate recording of the transaction. A method of recording the transactions may be selected once, more than once, or not at all.

b. For each of the municipality’s funds, accounts, and account groups (items 11 through 20), select the appropriate method of accounting and reporting. An accounting and reporting method may be selected once, more than once, or not at all.
Items to be answered:

a. Transactions

1. General obligation bonds were issued at par. A. Credit appropriations control.
2. Approved purchase orders were issued for supplies. B. Credit budgetary fund balance - unreserved.
3. The above-mentioned supplies were received and the related invoices were approved. C. Credit expenditures control.
4. General fund salaries and wages were incurred. D. Credit deferred revenues.
5. The internal service fund had interfund billings. E. Credit interfund revenues.
6. Revenues were earned from a previously awarded grant. F. Credit tax anticipation notes payable.
7. Property taxes were collected in advance. G. Credit other financing sources.
8. Appropriations were recorded on adoption of budget. H. Credit other financing uses.
9. Short-term financing was received from a bank, secured by the city’s taxing power. I. Debit appropriations control.
10. There was an excess of estimated inflows over estimated outflows. J. Debit deferred revenues.
K. Debit encumbrances control.
L. Debit expenditures control.

b. Funds and Accounts

11. Enterprise fund fixed assets. A. Accounted for in a fiduciary fund.
18. General long-term debt. H. Accounts for payment of interest and principal on tax supported debt.
19. Special revenue fund. I. Accounts for revenues from earmarked sources to finance designated activities.
20. Debt services fund. J. not reported.
NUMBER 3

(Estimated Time: 50 Minutes) The town of Drexel has the following financial transactions. The government has formally adopted GASB Statement Number 34. First prepare journal entries for the town based on the production of fund-based financial statements. Then, prepare journal entries in anticipation of preparing government-wide financial statements.

1. The town council adopts an annual budget for the General Fund estimating general revenues of $1.7 million, approved expenditures of $1.5 million, and approved transfers out of $120,000.
2. Property taxes of $1.3 million are levied. The town expects to collect all but 3 percent of these taxes during the year.
3. Two new police cars are ordered at an approximate cost of $150,000.
4. A transfer of $50,000 is made from the General Fund to the Debt Service Fund.
5. A bond payable of $40,000 is paid along with $10,000 of interest.
6. A $2 million bond is issued at face value to acquire a building to be converted into a high school.
7. The two police cars are received with an invoice price of $152,000. The voucher has been approved for this amount but not yet paid.
8. The building for the high school is acquired for $2 million in cash. Renovation is immediately begun.
9. Depreciation on the new police cars is computed as $30,000 for the period.
10. The town borrows $100,000 on a 90-day tax anticipation note.
11. A special assessment curbing project is begun. The government sells $80,000 in bonds at face value to finance this project. If the debt is not paid by the assessments collected, the town has pledged to guarantee the debt.
12. A contractor completes the curbing project and is paid $80,000.
13. Citizens are assessed $85,000 for the curbing project that has been completed.
14. The special assessments of $85,000 are collected in full. The debt is repaid plus $5,000 in interest.
15. The town receives a $10,000 grant to beautify a park. The grant will be paid to reimburse specific costs incurred by the town.
16. The town spends $4,000 to beautify the above park.

NUMBER 4

This question consists of 5 items. Select the best answer for each item.

Dease City is a governmental organization that has governmental-type funds.

Required:

Items 1 through 5 represent transactions by governmental-type funds based on the following selected information taken from Dease City's Year 6 financial records:

<table>
<thead>
<tr>
<th>General fund</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund balance at beginning of Year 6</td>
<td>$700,000</td>
</tr>
<tr>
<td>Year 6 estimated revenues</td>
<td>10,000,000</td>
</tr>
<tr>
<td>Year 6 actual revenues</td>
<td>10,500,000</td>
</tr>
<tr>
<td>Year 6 appropriations</td>
<td>9,000,000</td>
</tr>
<tr>
<td>Year 6 expenditures</td>
<td>8,200,000</td>
</tr>
<tr>
<td>Encumbrances at end of Year 6</td>
<td>500,000</td>
</tr>
<tr>
<td>Vouchers payable at end of Year 6</td>
<td>300,000</td>
</tr>
<tr>
<td>Year 6 operating transfers out</td>
<td>100,000</td>
</tr>
<tr>
<td>Year 6 property tax levy</td>
<td>9,500,000</td>
</tr>
<tr>
<td>Year 6 property taxes estimated to be uncollectible when property tax levy for Year 6 recorded</td>
<td>100,000</td>
</tr>
<tr>
<td>Year 6 property taxes delinquent at end of Year 6</td>
<td>150,000</td>
</tr>
</tbody>
</table>
Capital projects fund

Year 6 operating transfers in $100,000
Construction of new library wing started and completed in Year 6
- Proceeds from bonds issued at 100 in Year 6 $2,000,000
- Expenditures for Year 6 $2,100,000

For items 1 through 5, determine the amounts based solely on the above information.

1. What was the net amount credited to the budgetary fund balance when the budget was approved for fund-based reporting?
2. What was the amount of property taxes collected on the property tax levy for Year 6?
3. What amount for the new library wing was included in the capital projects fund balance at the end of Year 6?
4. What amount for the new library wing was charged to the building account at the end of Year 6 for government-wide reporting?
5. What amount for the new library wing bonds was included in the bonds payable account at the end of Year 6 for government-wide reporting?

NUMBER 5

Number 5 consists of 19 items. Select the best answer for each item.

The following selected information is taken from Shar City's general fund statement of revenues, expenditures, and changes in fund balance for the year ended December 31, Year 5:

<table>
<thead>
<tr>
<th>Revenues</th>
<th>$825,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property taxes – Year 5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditures</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current services</td>
<td></td>
</tr>
<tr>
<td>Public safety</td>
<td>428,000</td>
</tr>
<tr>
<td>Capital outlay (police vehicles)</td>
<td>100,000</td>
</tr>
<tr>
<td>Debt service</td>
<td>74,000</td>
</tr>
<tr>
<td>Expenditures – Year 5</td>
<td>$1,349,000</td>
</tr>
<tr>
<td>Expenditures – Year 4</td>
<td>56,000</td>
</tr>
<tr>
<td>Expenditures</td>
<td>$1,405,000</td>
</tr>
</tbody>
</table>

Excess of revenues over expenditures $153,000
Other financing uses $(315,000)
Excess of revenues over expenditures and other financing uses $162,000
Decrease in reserve for encumbrances during Year 5 $15,000
Decrease in unreserved fund balance during Year 5 $(147,000)
Unreserved fund balance January 1, Year 5 304,000
Unreserved fund balance December 31, Year 5 $157,000
The following selected information is taken from Shar's December 31, Year 5, general fund balance sheet:

Property taxes receivable—
   delinquent – Year 5 $34,000
   Less:  Allowance for estimated uncollectible taxes – delinquent  20,000

Vouchers payable $89,000

Fund balance—
   reserved for encumbrances – Year 5 $43,000
   reserved for supplies inventory  38,000
   unreserved  157,000

Additional Information:
• Debt service was for bonds used to finance a library building and included interest of $22,000.
• $8,000 of Year 5 property taxes receivable was written-off; otherwise the allowance for uncollectible taxes balance is unchanged from the initial entry at the time of the original tax levy at the beginning of the year.
• Shar reported supplies inventory of $21,000 at December 31, Year 4.

Required:

a. For Items 1 through 3, indicate the type of classification used by Shar:

   (A) Character.
   (B) Function.
   (C) Object.

   1. Expenditures – current services.
   2. Expenditures – capital outlay.

b. For Items 4 through 6, select the best answer to the question for fund-based reporting.

4. What recording method did Shar use for its general fund supplies inventory?
   A. Consumption.
   B. Purchase.
   C. Perpetual inventory.

5. How should fund equity be reported in Shar's electric utility enterprise fund?
   A. A single amount described as fund balance.
   B. Separately for capital and retained income.
   C. Separately for amount due to general fund and retained income.

6. Shar's electric utility enterprise fund borrowed $1,000,000 subject to Shar's general guarantee. Where should the liability be reported?
   A. The electric utility enterprise fund.
   B. The general long-term debt account group.
   C. Both the electric utility enterprise fund and the general long-term debt account group.
c. For **Items 7 through 13**, indicate the part of Shar's general fund statement of revenues, expenditures, and changes in fund balance affected by the transaction.

(A) Revenues.
(B) Expenditures.
(C) Other financing sources and uses.
(D) Statement of revenues, expenditures, and changes in fund balance is **not** affected.

7. An unrestricted state grant is received.
8. The general fund paid pension fund contributions that were recoverable from an internal service fund.
9. The general fund paid $60,000 for electricity supplied by Shar's electric utility enterprise fund.
10. General fund resources were used to subsidize Shar's swimming pool enterprise fund.
11. $90,000 of general fund resources were loaned to an internal service fund.
12. A motor pool internal service fund was established by a transfer of $80,000 from the general fund. This amount will not be repaid unless the motor pool is disbanded.
13. General fund resources were used to pay amounts due on an operating lease.

d. **Items 14 through 19** require numeric responses. For each item, calculate the numeric amount.

14. What was the reserved fund balance of the Year 4 general fund?
15. What amount was collected from Year 5 tax assessments?
16. What amount is Shar's liability to general fund vendors and contractors at December 31, Year 5?
17. What amount should be included in the capital asset account for the cost of assets acquired in Year 5 through the general fund for government-wide reporting?
18. What amount arising from Year 5 transactions decreased liabilities reported in the long-term debt account for government-wide reporting?
19. What amount of total actual expenditures should Shar report in its Year 5 general fund statement of revenues, expenditures, and changes in fund balance—budget and actual?
**NUMBER 6**

**Number 6** consists of 19 items. Select the **best** answer for each item for fund-based reporting.

The following information relates to Bel City, whose first fiscal year ended December 31, Year 3. Assume Bel has only the long-term debt specified in the information and only the funds necessitated by the information.

1. **General fund:**

   - The following selected information is taken from Bel's Year 3 general fund financial records:

<table>
<thead>
<tr>
<th></th>
<th><strong>Budget</strong></th>
<th><strong>Actual</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Property taxes</td>
<td>$5,000,000</td>
<td>$4,700,000</td>
</tr>
<tr>
<td>Other revenues</td>
<td>1,000,000</td>
<td>1,050,000</td>
</tr>
<tr>
<td><strong>Total revenues</strong></td>
<td><strong>$6,000,000</strong></td>
<td><strong>$5,750,000</strong></td>
</tr>
<tr>
<td><strong>Total expenditures</strong></td>
<td><strong>$5,600,000</strong></td>
<td><strong>$5,700,000</strong></td>
</tr>
<tr>
<td>Property taxes receivable—delinquent</td>
<td>$420,000</td>
<td></td>
</tr>
<tr>
<td>Less: Allowance for estimated uncollectible taxes—delinquent</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td><strong>Less: Allowance</strong></td>
<td><strong>$370,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

   - There were no amendments to the budget as originally adopted.

   - No property taxes receivable have been written off, and the allowance for uncollectibles balance is unchanged from the initial entry at the time of the original tax levy.

   - There were no encumbrances outstanding at December 31, Year 3.

2. **Capital project fund:**

   - Finances for Bel's new civic center were provided by a combination of general fund transfers, a state grant, and an issue of general obligation bonds. Any bond premium on issuance is to be used for the repayment of the bonds at their $1,200,000 par value. At December 31, Year 3, the capital project fund for the civic center had the following closing entries:

   - Revenues $800,000
   - Other financing sources
     - bond proceeds $1,230,000
   - Other financing sources
     - operating transfers in $500,000
   - Expenditures $1,080,000
   - Other financing uses
     - operating transfers out $30,000
   - Unreserved fund balance $1,420,000

   - Also, at December 31, Year 3, capital project fund entries reflected Bel's intention to honor the $1,300,000 purchase orders and commitments outstanding for the center.

   - During Year 3, total capital project fund encumbrances exceeded the corresponding expenditures by $42,000. All expenditures were previously encumbered.

   - During Year 4, the capital project fund received no revenues and no other financing sources. The civic center building was completed in early Year 4 and the capital project fund was closed by a transfer of $27,000 to the general fund.
3. **Water utility enterprise fund:**
   - Bel issued $4,000,000 revenue bonds at par. These bonds, together with a $700,000 transfer from the general fund, were used to acquire a water utility. Water utility revenues are to be the sole source of funds to retire these bonds beginning in year Year 6.

**Required:**
For **Items 1 through 12**, indicate if the answer to each item is (Y) yes, or (N) no.

**Items 1 through 8** relate to Bel's general fund.

1. Did recording budgetary accounts at the beginning of Year 3 increase the fund balance by $50,000?
2. Should the budgetary accounts for Year 3 include an entry for the expected transfer of funds from the general fund to the capital projects fund?
3. Should the $700,000 payment from the general fund, which was used to help to establish the water utility fund, be reported as an "other financing use—operating transfers out"?
4. Did the general fund receive the $30,000 bond premium from the capital projects fund?
5. Should a payment from the general fund for water received for normal civic center operations be reported as an "other financing use—operating transfers out"?
7. Would closing budgetary accounts cause the fund balance to increase by $400,000?
8. Would the interaction between budgetary and actual amounts cause the fund balance to decrease by $350,000?

**Items 9 through 12** relate to Bel's funds other than the general fund.

9. Should the water utility enterprise fund be included in Bel's proprietary funds?

In which fund should Bel report capital and related financing activities in its Year 3 statement of cash flows?

10. Debt service fund.
11. Capital project fund.
12. Water utility enterprise fund.
For **Items 13 through 19**, determine the amount.

**Items 13 and 14** relate to Bel's general fund.

13. What was the amount recorded in the opening entry for appropriations?

14. What was the total amount debited to property taxes receivable?

**Items 15 through 19** relate to Bel's funds other than the general fund.

15. What amount should be reported for bonds payable at December 31, Year 3, for the civic center capital projects fund?

16. What was the completed cost of the civic center?

17. How much was the state capital grant for the civic center?

18. In the capital project fund, what was the amount of the total encumbrances recorded during Year 3?

19. In the capital project fund, what was the unreserved fund balance reported at December 31, Year 3?
Chapter Fifteen
Solutions to Governmental Accounting Questions

1. (a) The primary authoritative body for determining governmental accounting standards is the GASB (Rule 203 AICPA Code of Conduct).

2. (a) GASB Concepts Statements and GASB Statement 11 emphasize that the measurement focus of governmental funds is on the flow of financial resources. Choice (b) is incorrect because governments do not operate for profit and income determination. Choice (c) is incorrect because capital maintenance (fixed assets) is not the primary emphasis. In fact, fixed assets are not even recorded in the funds.

3. (b) The primary measurement focus of governmental fund types is the inflows, outflows, and balances of financial resources.

4. (a) Interperiod equity assumes that the revenues of a period will at least equal the expenditures of the period. This financial objective assumes that a balanced budget will be adopted. Residual equity is not related to interperiod equity.

5. (d) GASB believes that Interperiod equity is a significant part of accountability and is fundamental to public administration.

6. (c) Governmental financial reporting should provide information to assist users in making social and political decisions and in assisting users in assessing whether current-year citizens receive services whose payment is shifted to future years.

7. (c) A fund is considered a basic accounting unit and is used to assist in ensuring fiscal compliance. For example, property taxes are recorded in the general fund and spent in accordance with the budget of the governing unit.

8. (c) The answer (c) is a definition of economic resources management focus. Answer (a), (b) and (d) all use current resources management focus.

9. (b) Answers (a), (c) and (d) would use the economic resources management focus.

10. (a) Governmental. The special revenue fund is a governmental fund by definition.

11. (d) Debt service. The modified accrual basis is recommended for all governmental funds which include debt service. The accrual basis is recommended for proprietary and nonexpendable trust funds.

12. (b) Special revenue. In that Governmental fund, budgetary accounts are used. Not so in proprietary and fiduciary funds.

13. (d) Governmental. Governmental funds include general, special revenue, debt service and capital projects and permanent funds.

14. (d) No, yes. Fixed assets are not reported in the capital projects fund. Internal service fund assets are accounted for within that fund because depreciation is computed on fixed assets so that costs can be properly allocated to users.

15. (a) Permanent Funds are part of the governmental funds category.

16. (d) Investment trust funds are classified as Fiduciary Funds.
17. (d) Internal service. An internal service fund receives such capital to provide the services necessary to carry out its mission. The other funds have no such account.

18. (d) Modified accrual basis. A capital projects fund is a governmental fund for which the modified accrual basis is recommended.

19. (b) Internal Service is a proprietary fund. The accounting and reporting for such funds is similar to that of for-profit entities (GAAP).

20. (b) Land received from a donor with the stipulation that the land must remain intact, is recorded in the permanent fund.

21. (b) Assets that are held for disbursement to a different entity are recorded in the agency fund. Eldorado County is an intermediary that has custody of these funds.

22. (d) Trust fund. A trust fund is used to account for money or property received from non-enterprise fund sources to be held in the capacity of a trustee, custodian or agent. In a retirement system trust fund the focus is on the Economic Resources Measurement Concept.

23. (b) Private purpose trust funds are classified as Fiduciary Funds.

24. (a) All governmental fund types use the modified accrual basis of accounting. The capital projects fund is a governmental fund. The other use full accrual.

25. (d) Become available and measurable. The modified accrual basis of accounting, by definition, recognizes revenue when it is available and measurable. The term "available" means collectible in the current period or soon enough thereafter to be used to pay liabilities that are owed at the balance sheet date. Measurable refers to the ability to quantify in monetary terms the amount of the revenue and receivable.

26. (c) Accrual basis, no; Modified accrual basis, yes. Available and measurable is the definition of the modified method. Accrual basis differs in that "Other Revenues" are recorded as revenue when earned and become measurable (Proprietary funds).

27. (a) The general fund is a governmental fund, and recognizes revenues when they become available and measurable.

28. (d) "Earned and measurable" are attributes of the accrual method.

29. (a) The modified accrual basis of accounting is used by the governmental type funds. The full accrual basis is used by the proprietary type funds.

30. (c) Debit estimated revenues control, $30,000,000 - The entry to record the budget is as follows:

   DR Estimated Revenue Control
   CR Appropriations Control
   CR Budgetary Fund

   The above assumes that estimated revenues exceed estimated appropriations. This entry is reversed as a closing entry at the end of the period.

31. (c) Credit appropriations control, $29,000,000 - See previous answer.

32. (b) Credit budgetary fund balance, $1,000,000 - See above answer in series.
33. (c) Estimated revenues $1,000,000  
   Appropriations $900,000  
   Budgetary fund balance 100,000

34. (b) The budget is recorded.  
The recording of the budgetary opening entry is:
   Estimated revenue control xxx  
   Appropriation control xxx  
   Budgetary fund balance xxx

35. (d) Appropriations—The entry to record the budget:
   Estimated revenue control xxx  
   Appropriation control xxx  
   Budgetary fund balance xxx

This entry assumes that Estimated revenue exceeds appropriations, which is the normal condition.

36. (a) Definition: appropriation.

37. (b) Property taxes are recorded.  
Revenue is increased when property taxes are recorded under both the accrual and modified accrual methods of accounting. Choices (a), (c) and (d) are incorrect as they involve budgetary accounts. Revenue control is not a budgetary account.

38. (d)  
   Property taxes receivable 100  
   Allowance for uncollectible account 10  
   Revenues 90

39. (c) Property taxes are recognized as a receivable when they are levied, however recognition must happen when they are both measurable and available.

   Collections during the year Year 4 $500,000  
   Expected collections during first 60 days of Year 5 100,000  
   Total net property tax revenue $600,000

The other expected collections of 90,000 (60,000+30,000) would be recorded as a deferred revenue. The $10,000 estimated to be uncollectible would not be considered, because revenues are recorded net.

40. (d) Property taxes. Property taxes, unless otherwise designated would be general fund revenue and is the best answer. (a) is a possible answer, but would usually be enterprise fund revenue, (b) is clearly trust fund revenue, and (c) is internal service fund revenue.

41. (b) The sequence of entries is explained by the answer choice. Choices (a), (c) and (d) are foreign to fund accounting. An encumbrance is the recording of an obligation to incur an expenditure. When this obligation becomes a liability, it is reversed and the expenditure/liability is recorded.

42. (a) A purchase order is approved.  
When a purchase order is approved the following entry is made:
   Encumbrances control  
   Budgetary fund balance reserved for encumbrances

A credit balance is the normal balance for this account, hence it is increased when a purchase order is approved. When supplies orders are received, the above entry is reversed, decreasing the balance. The account's function is to measure obligations outstanding not recorded as liabilities.

15S-3
43. (d) Elm should debit the reserve for encumbrances account for the same $5,000 estimated amount when the account credited and the purchase order is issued.

<table>
<thead>
<tr>
<th>Encumbrances control</th>
<th>5,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund balance reserved for encumbrances</td>
<td>5,000</td>
</tr>
</tbody>
</table>

When supplies and invoices are received:

<table>
<thead>
<tr>
<th>Fund balance reserved for encumbrances</th>
<th>5,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encumbrances control</td>
<td>5,000</td>
</tr>
<tr>
<td>Expenditure control</td>
<td>4,950</td>
</tr>
<tr>
<td>Vouchers payable</td>
<td>4,950</td>
</tr>
</tbody>
</table>

44. (a) Reserve for encumbrances. When a governmental unit approves (goods, equipment, etc.) orders the following entry is made:

<table>
<thead>
<tr>
<th>Encumbrance control</th>
<th>xxx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund balance reserved for encumbrances</td>
<td>xxx</td>
</tr>
</tbody>
</table>

45. (a) Expenditure. Expenditures include current operating expenses which require the current or future use of net current assets, debt service, and capital outlays.

46. (c) Only the outstanding purchase order amounts.

47. (b) $2,250

<table>
<thead>
<tr>
<th>Appropriations</th>
<th>$7,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditures</td>
<td>(4,500)</td>
</tr>
<tr>
<td>Encumbrances</td>
<td>(750)</td>
</tr>
<tr>
<td>Unobligated balance</td>
<td>$2,250</td>
</tr>
</tbody>
</table>

48. (d) Estimated revenue control should be credited for $20,000,000. Estimated revenues control is a budgetary account and it is debited when the budget is initially recorded. When closed at year-end the estimated revenue control account is credited.

49. (b) Expenditures.
Expenditures is a temporary account (operating and revenue) that must be closed at year end. The other choices are balance sheet accounts.

50. (d) Yes, No. Estimated revenues are closed by reversal of the opening budgetary entry. Fund balance cannot be closed because it is a balance sheet account representing the difference between fund assets and liabilities.

51. (a) When the budget is initially recorded appropriations control is credited. At year end the budget entry is reversed, thus the appropriations control account would be debited to close it out.

52. (b) The normal balance of the expenditures control account is a debit. Thus, to close the account at year end it is credited.

53. (b) The estimated revenue control is eliminated when the budgetary accounts are closed.

54. (b) Reservations of fund balance.
Encumbrances represent neither expenditures nor liabilities. In many governments, encumbrances outstanding at the end of a period are carried forward as a reservation of fund balance with a corresponding reduction in unreserved fund balance. Procedure:

1. Reverse outstanding encumbrances at year end.
2. DR Fund Balance; CR Fund balance reserved for encumbrances.
3. Reverse entry #2 in the next FY.
4. Record encumbrance outstanding at the beginning of the year.
55. (c) Gasoline taxes to finance road repairs. Special revenue funds are used to account for revenues derived from specific taxes or other earmarked revenue sources.

56. (a) Revenues become available and measurable—Per NCGA Statement 1.

57 (d) $1,200,000. The $300,000 amount is a restricted special revenue. The $900,000 is a special revenue fund item used to account for specific revenue sources that are legally restricted to expenditure for specific purposes.

58. (d) Other financing sources $2,000,000; expenditures $2,000,000. NCGA #1 states that "Proceeds of long-term debt not recorded as fund liabilities—e.g. ... Capital Projects or Debt Service Funds -- normally should be reflected as 'Other Financing Sources' in the operating statement of the recipient fund. Such proceeds should be reported in captions such as 'Bond Issue Proceeds' . . ." With respect to the $500,000 transfer from the general fund, operating transfers are legally authorized transfers from a fund receiving revenue (GF) to the fund through which resources are to be expended (Capital Projects Fund). Operating transfers should be reported as "Other Financing Sources (Uses)".

59. (b) Other financing uses, $500,000. The $500,000 transfer from the general fund is considered an operating transfer and is to be reported as "Other Financing Uses".

60. (a) $5,000,000 in 20X6.
Bond proceeds are recorded in capital projects when received—not when used. DR Cash, CR Bond Proceeds. General long-term debt account group would also record the transaction: DR Amount to be provided, CR Bonds payable.

61. (c) The $400,000 grant from state government is recorded as revenue. The other $600,000 ($500,000 bond proceeds and $100,000 transfer from general fund) are recorded as other financing sources, not revenues.

62. (b) The $50,000 premium is initially recorded in the capital projects fund. An entry is made, however, to transfer the premium to the debt service fund. Cash is received in the debt service.

63. (b) $400,000. Bonds for the water treatment plant construction are accounted for in an enterprise fund which handles its own debt. Funds accumulated to pay the general obligation bonds would be accumulated in the debt service fund.

64. (c) The cash received from the general fund is recorded as an operating transfer. The payments for interest are operating activities of the fund and are recorded as expenditures.

65. (d) $0. Government entities are non-profit entities, they are not concerned with income determination. The debt service fund does not record or amortize a liability for the bond premium.

66. (c) $2,900,000
| Debt principal matured | $2,000,000 |
| Interest on matured debt | $900,000 |
| Expenditures (Modified accrual basis) | $2,900,000 |

NCGA #1 states that "Financial resources usually are appropriated in other funds for transfer to a Debt Service Fund in the period in which maturing debt principal and interest must be paid. Such amounts thus are not current liabilities of the Debt Service Fund as their settlement will not require expenditure of existing fund assets." The nonrecognition of accrued interest is a major distinction between the accrual and modified accrual basis.
67. (a) $600,000. Only the interest revenue from investments is recorded as revenue by debt service. NCGA #1 states, "Interfund transfers should be distinguished from revenues, expenses, or expenditures in financial statements." . . . "Operating transfers should be reported in the 'Other Financing Sources (Uses)' section in the statement of revenues." Operating transfers are legally authorized transfers from a fund receiving revenue to the fund through which the resources are to be expended. Therefore, the cash transferred from the general fund ($1,000,000 + $900,000) would not be recorded as revenue.

68. (d) $2,800,000. Proprietary funds, sometimes referred to as "income determination", "non-expendable", or commercial-type funds include both enterprise and internal service funds.

69. (a) Enterprise funds are used to account for those activities in which income determination is desired. Utilities are usually self-supporting entities that should measure income.

70. (c) Cash basis, no; Modified accrual, no.
The accrual basis is required for proprietary funds.

71. (d) An enterprise fund is used for a self-supporting activity that charges the public for services, and measurement of income is important. Services provided to other departments on a cost reimbursement basis are accounted for by the internal service fund.

72. (d) $5,900,000. Self-sustaining activities are operated by governmental units as enterprise funds.

73. (d) Enterprise fund and depreciation on the fixed assets should be recorded.
Enterprise funds (proprietary) carry their own assets, record depreciation, follow GAAP and match costs and revenue as much as possible.

74. (b) No, Yes, Yes. Enterprise funds carry their own bonds, have a retained earnings account, but do not use budgetary accounts.

75. (d) Enterprise funds are "business type" funds and as such use the full accrual basis of accounting. The accounting for enterprise funds is similar to "for profit" enterprises and thus fixed assets and depreciation are accounted for as if the entity uses a "for profit" organization.

76. (b) Restricted asset, yes; liability, yes; Fund equity, no.
A restricted asset would be appropriately classified in the balance sheet with the credit side shown as a liability. Since the deposit must at some point be returned or applied to a customer's account, it could not properly be part of fund equity.

77. (d) Enterprise: Yes—Long-term debt: No
Enterprise funds carry their own long-term debt.

78. (d) Operating revenues.
Billings for services provided by the internal service fund to other funds of the same governmental entity, are reported as revenues.

79. (d) Due from water and sewer fund $100,000
Operating revenues control $100,000

As a proprietary fund, the entry resembles that of a commercial enterprise—debit of a receivable and a credit to a proper revenue account.

80. (d) Equity transfers to proprietary funds should be reported as additions to contributed capital.
81. (a) The internal service fund recognizes revenue in the same manner as “regular” business entities. Thus, operating revenues is credited when sales are made.

82. (b) Internal service funds are used to account for the financing of goods or services provided by one department or agency to the other departments or other agencies on a cost reimbursement basis.

83. (c) The answer (a) is incorrect because infrastructure assets using the modified approach are not depreciated. Answers (b) and (d) are wrong because all works of art or historical treasures are not depreciated. If the collections are held for the use of public service and not for gain, preserved, cared for and kept unencumbered and if sold, the proceeds are used to obtain items for the collection. They do not have to be capitalized or depreciated.

84. (c) The answer (a) is wrong because the balance sheet of governmental funds does not record fixed assets. Answer (d) is wrong because SGAS 34 eliminated the use of the fixed asset group of accounts.

85. (a) The correct journal entry for fund-based statements would be a credit to other financing sources ($69,000) and a credit to capital lease obligations ($69,000) for government-wide statements.

86. (a) The correct journal entry for fund-based statements would be a debit to expenditures – leased asset ($69,000) and a debit to property-capital lease ($69,000).

87. (d) Depreciation of $7,667 ($69,000 / 9 years) is recorded by government-wide statements. Depreciation is not recorded for fund-based statements because the lease is not capitalized.

88. (b) Interest of $6,900 (10% x $6,900) would be recorded on both types of statements. Fund-based statements use the term “expenditures” and government-wide statements use “expense”.

89. (c)

Fund-Based Financial Statements

JE

Expenditures-Interest $6,900
Expenditures-Principal $3,100
Cash $10,000

Government-Wide Financial Statements

JE

Interest Expense $6,900
Capital Lease Obligation $3,100
Cash $10,000

90. (b) The general fund has a current resources focus so the only journal entry would be a debit to expenditures-landfill closure cost and a credit to cash for $40,000.

91. (c) The government-wide statements record an expense of $120,000 (8% x $1,500,000). The journal entry would be a debit to expense-landfill closure cost and a credit to landfill closure liability.

92. (c)

Journal entry:

Landfill closure liability $40,000
Cash $40,000

93. (d) To be considered a major fund, the fund must be the major operating fund or meet the quantitative criteria.

94. (a) The main operating fund (the general fund) is always reported as a major fund, and any governmental or enterprise fund believed to be particularly important to users may also be reported in this way. Moreover, any fund must be reported as major if revenues, expenditures/expenses, assets, or liabilities (excluding revenues and expenditures/ expenses reported as extraordinary items) of the fund are (1) at least 10% of the corresponding total for all funds of the same category or type, that is, for all governmental or all enterprise funds, and (2) at least 5% of the corresponding total for all governmental and enterprise funds combined. Answer (b) is incorrect because the
percentages are backwards. Answers (c) and (d) are incorrect because the last portion of the answer should read “all government funds and **enterprise funds** combined”.

95. (d) Answers (a), (b), and (c) do not meet the prescribed criteria and are incorrect. Answer (d) is correct because the GASB does allow the government to use its judgement in the selection of major funds.

96. (d)

97. (a) Answer (a) is correct because SGAS 34 requires governmental funds to report a balance sheet and the statement of revenues, **expenditures**, and changes in fund balances.

98. (b) Answer (a) is incorrect because revenues are classified by source. Answer (c) is incorrect because expenditures are classified by function. Answer (d) is incorrect because other financing sources are not revenues.

99. (c) Cash equivalents are defined in GASB 9 as short-term, highly liquid investments that are readily convertible into known amounts of cash and are near maturity so that the changes in rates represent insignificant risks (three months or less).

100. (c) Answers (a) and (b) are wrong because governmental funds balance sheet uses a current resources focus which would exclude capital assets and long-term debt. Answer (d) is incorrect because SGAS 34 eliminated the fixed assets and long-term debt group of accounts.

101. (d) All intra-fund transfers are eliminated.

102. (b) SGAS 34 requires that net assets be reported in three categories: invest in capital assets net of related debt, restricted net assets, and unrestricted net assets. Answers (a) and (c) are incorrect because SGAS 34 does not require classified statements. Answer (d) is incorrect because SGAS 34 prefers a statement of net assets and does not require a balance sheet format.

103. (a) Answers (b) and (d) are incorrect because restricted net assets may include both expendable and non-expendable endowments. Answer (c) is incorrect because combined net assets is not a section of the Statement of Net Assets.

104. (b) The Statement of Activities classifies expenses by function.

105. (a) Property taxes are shown under the general revenues section of the Statement of Activities. Answers (b) and (c) are shown as a part of program revenues (see Exhibit A). Answer (d) is incorrect because it is a type of non-exchange transaction but is not shown separately on the Statement of Activities.

106. (c) Transactions that are unusual in nature and infrequent in occurrence are extraordinary items. Special items are transactions or events that are unusual in nature or infrequent in occurrence and within the control of management.

107. (d) Since fiduciary funds are not available for governmental use, they are not included in government-wide reports but are included in fund-based reports. Answer (b) is incorrect because enterprise funds are not a category of funds.

108. (a) Answers (b) and (c) are incorrect because the notes are a distinct part of financial reporting and are not a part of any other disclosure requirements. Answer (d) is wrong because the main focus is on the primary unit, not the component units.

109. (c) SGAS 34 requires budgetary comparison schedules be presented for the fund-based general fund and each special revenue fund with a legally adopted budget. The schedule is a comparison of the actual results vs. the original budget, the first appropriated budget and the final appropriated budget. A variance column may or may not be used.
110. (b) SGAS 34 requires that budgetary comparison schedules be presented as a part of the required supplemental information for the general funds and special revenue funds with legally adopted budgets.

111. (a) Answer (a) is correct because the summary reconciliation is required and must be presented at the bottom of the statements or in an accompanying schedule. (See Exhibit I and II)

112. (c) Property taxes are viewed as imposed nonexchange revenues because the government imposes an assessment but no underlying transaction exists.

113. (b) Property taxes, liquor licenses and fines are imposed nonexchange revenues. Sales taxes are a derived tax revenue.

114. (a) Income taxes, sales taxes and motor fuel taxes are examples of derived tax revenues. Fines are an example of imposed non-exchange revenue.

115. (a)

116. (c)

117. (b) Answers (a) and (d) are obviously wrong. Answer (c) is wrong because management’s discussion and analysis precedes the financial statements.

118. (d) Answer (b) is wrong because the fixed asset account group has been eliminated. Answer (c) is wrong because a statement of capital assets does not exist.

119. (b)

120. (c) Answer (a) is wrong because of the word only. The statement of activities includes governmental activities, business type activities and component units. Answers (b) and (d) are wrong because fiduciary funds do not appear on the statement of activities nor do fixed assets or long-term debt.

121. (b) The categories for program revenues are: charges for services, capital grants and contributions and operating grants and contributions.

122. (c) Answers (a), (b), and (d) are fiduciary funds.

123. (b)

124. (d) Answers (a) and (b) are incorrect because non-expendable and expendable trust funds have been eliminated. (c) is incorrect because it reads “private purpose agency fund. In order for (c) to be correct it should read “private purpose trust fund.”

125. (c)

126. (a)

127. (d) Governmental funds should report a balance sheet and a statement of revenues, expenditures, and changes in fund balances.

128. (a)

129. (b) The general fixed asset and long-term groups were eliminated by SGAS 34.
130. (b) Fines are imposed nonexchange revenues. Sales taxes are derived tax revenues. Answer (c) is a voluntary nonexchange transaction because the State does not require the City to create reading programs.

131. (d) Governmental funds do not have a Statement of Activities as a financial report. Since Proprietary funds are on accrual basis and report their property, plant and equipment, they would record depreciation on their equivalent of an income statement.

132. (b) Answers (a) and (d) are incorrect because these funds were eliminated by SGAS 34. Answer (c) is incorrect because permanent funds are a part of governmental funds.

133. (d) Agency Funds are Fiduciary Funds.

134. (a) A statement of cash flows is required for all proprietary funds but not for governmental funds. Capital projects fund is a governmental fund while the enterprise fund is a proprietary fund.

135. (c) $6,000,000. The amount to be reported as cash flows from capital and related financing activities would include proceeds from sale of bonds $5,000,000
capital contributed by subsidiaries $1,000,000.

The $3,000,000 of cash received from customer households would be included in the operating activities.

136. (c) Modified accrual, Accrual. Per NCGA Statement 1, Governmental funds use the modified accrual and Proprietary funds use the accrual method.

137. (b) Credited at the beginning of the year and debited at the end of the year.
Beginning of the year opening entry:

| Estimated revenue control | $1,000,000 |
| Appropriations             | $950,000  |
| Budgetary fund balance     | 50,000    |

End of year—reverse the above, as is

138. (b) The $1,000,000 unrestricted state grant would be recorded in the general fund. The $200,000 interest bank accounts held for employees pension plan would be recorded in the pension plan (trust fund).

139. (d) Yes, no.
The modified accrual basis of accounting is recommended for all governmental fund entities. The "accrual" basis of accounting is recommended for proprietary funds.

140. (a) Only the property taxes, licenses, and fines of $9,000,000 would be classified as estimated revenue. Proceeds of debt issue of $500,000 and interfund transfers for debt service of $1,000,000 are both other financial sources and are not part of the estimated revenue.

141. (a) Appropriations would be credited for $80,000.
The entry to record the budget would be:

| Estimated Revenue   | 100,000 |
| Appropriations      | 80,000  |
| Budgetary fund balance | 20,000 |

142. (c) If estimated revenue exceeds appropriations, budgetary fund balance would be credited for $20,000.

143. (b) The account is closed out at the end of the year. At year end revenues control is debited in the amount of its credit balance. Likewise, expenditures are credited in the amount of its debit balance. Any difference becomes part of fund balance.
144. (c) GASB Code 2450.101 establishes standards for reporting cash flows of proprietary and nonexpendable trust funds and governmental entities that use proprietary fund accounting, including public benefit corporations, governmental utilities, governmental hospitals.

145. (c) The entry to record the budget is a debit to Estimated Revenues and a credit to Appropriations with the balance to Fund Balance (either a dr. or cr.). When the budgetary accounts are closed, this entry is reversed.

146. (a) $2,800,000.
The activities described classify these entities as enterprise funds.

147. (a) Cash: restricted asset; Marketable securities: restricted asset.
If the funds cannot be spent for normal operating purposes, the funds are restricted regardless of whether cash, marketable securities or something else.

148. (d) Expenditures control.
Salaries and wages and other similar type recurring items are not ordinarily subject to being recorded as encumbrances such as equipment or supplies. Item (d) is the only non-budgetary account listed.

149. (d) The $40,000 would be recorded in an enterprise fund. The $100,000 would be recorded in a trust fund. The $6,000,000 would be recorded in the general fund, a governmental type fund.

150. (a) The General fund does not have any fixed assets, so the purchase would be recorded as an expenditure. Remember, Powell City had a budget for the purchase and the expenditure would be matched against the budget.

151. (d) Depreciation expenses on assets are not recorded for governmental funds but are recorded for all depreciable assets in the proprietary funds.

152. (a) The proprietary funds include both:

<table>
<thead>
<tr>
<th>Type of Fund</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise funds</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Internal service funds</td>
<td>400,000</td>
</tr>
<tr>
<td><strong>Total proprietary balance</strong></td>
<td><strong>$1,400,000</strong></td>
</tr>
</tbody>
</table>

153. (a) Other financing sources control, $1,000,000.
The general fund is affected only by the $1,000,000 transfer to finance the cost of the annex. The proceeds of the $2,000,000 bond issue would be recorded in the capital projects fund.

154. (c) Other financing sources control, $3,000,000; Expenditures control, $3,000,000
Capital projects records both the $1,000,000 transfer from the general fund and $2,000,000 proceeds of the bond issue as “other financing sources”. Upon payment the disbursement is recorded as an “expenditure”. Answer (d) is incorrect since the receipt of these funds is **not** recorded as “revenue,” but as “other financing sources”.

155. (c) Monies received for the construction of governmental-owned assets is recorded in the capital projects fund.

156. (b) The closing entry made at the end of Year 4 would be:

<table>
<thead>
<tr>
<th>Account Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other financing sources</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>Revenues</td>
<td>8,000,000</td>
</tr>
<tr>
<td>Expenditures</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>Other financing uses</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Fund balance</td>
<td>2,500,000</td>
</tr>
</tbody>
</table>

Appropriations is part of the budget which is reversed at year end and does not affect fund balance.
157. (a) In government-wide reporting, the required supplemental information and the footnotes are two separate sections of the overall report. Therefore, there would not be any need to disclose the information twice.

158. (c) The budget is recorded. Appropriations are credited when the budget is recorded.

159. (a) The budgetary accounts are closed. The budgetary accounts are set up as opening entries as follows:

- Estimated revenues control
- Appropriations control
- Budgetary fund balance

At the end of the accounting period the above entry is reversed.

160. (c) At estimated fair value when received. Donated fixed assets should be recorded at their estimated fair value at the time received.

161. (d) Special revenue. Two funds, (a) and (b), are proprietary funds which use the accrual basis. Nonexpendable trust funds also use the accrual method. Special revenue is a governmental fund which uses the modified method.

162. (b) Funds collected by one governmental unit for the benefit of another governmental unit are recorded in agency funds.

163. (d) Internal service. Proprietary funds use the accrual basis of accounting. Internal service and enterprise are proprietary funds. Answers (a), (b) and (c) are governmental funds and use the modified accrual method.

164. (d) Restricted asset, restricted asset. Since the customer deposits are not available to be spent for normal operating purposes, the investments cannot be accounted for as an unrestricted asset. The key factor here is the fact that the funds are restricted and are not available for current use.

165. (d) Encumbrances control. When a purchase order is approved, the entry is:

- Encumbrances control xxx
- Fund balance reserved for encumbrances xxx

When the order is received, this entry is reversed.

166. (d) When a purchase order is approved-

- Encumbrances 100
- Reserve for Encumbrances 100

When the order arrives the entry is reversed.-

- Reserve for Encumbrances 100
- Encumbrances 100

Only an error would cause a difference in balance.

167. (b) Encumbrances are established when the purchase order is written. When the goods arrive, the encumbrance is reduced, and the actual expenditure and liability recorded for the amount of the invoice. Thus the encumbrances decrease and the expenditures increase.
168. (a) Expenditures:

<table>
<thead>
<tr>
<th></th>
<th>$100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and wages</td>
<td></td>
</tr>
<tr>
<td>Vouchers payable</td>
<td></td>
</tr>
</tbody>
</table>

(b) is not correct since cost expirations (expenses) are not measured by governmental funds. (c) Salaries, wages and other periodic type payments are not subject to the encumbrance system. Further (c) is not correct encumbrance entry. In (d) an expenditure cannot be recorded by reducing fund balance directly.

169. (a) Principal, yes; Interest, yes.

The function of the general long-term debt account group is to account for principal only. Funds may be accumulated, however, in debt service to pay both principal and interest of such debt.

170. (c) $350,000.

Proprietary funds maintain their own cash accumulations for payment of debt. General long-term obligations, however, would be paid from cash accumulated in a debt service fund.

171. (b) When a governmental unit approves orders (obligates expenditures) for goods or equipment, the entry in answer (b) is entered. Answer choices (a), (c), and (d) have no merit in fund accounting.

172. (a) $0. Amounts received through bond issue, operating transfers-out and material proceeds of fixed asset dispositions, other sources for the purpose of capital projects are credited to revenue (a previous practice). The applicable credit is to "Other financing sources control."

173. (a) Government-wide reporting is like corporate reporting, so interest expense will be for the 10 months the bond has been outstanding ($1,000,000 x 6% x 10/12 = $50,000). The interest payable will be the interest accrued since the last payment date or September 1 ($1,000,000 x 6% x 4/12 = $20,000).

174. (d) $240,000. A careful reading of the facts reveals that the $210,000 for parking meters is a capital expenditure. Because this is an enterprise fund, this amount is capitalized and depreciation is recorded. GAAP is followed. $400,000 - $90,000 - $70,000 = $240,000 net income.

175. (c) Cash equivalents are defined in GASB 9 as short-term, highly liquid investments that are both readily convertible to cash, and so near to their maturity that they present insignificant risk of changes in interest rates. Investments with maturities of 3 months or less qualify as cash equivalents. Both 3-month T-bills and 3-year T-notes mature in 3 months or less from the date purchased for a total cash equivalent of $80,000.

176. (b) The key point is that the grant is to support operations of the enterprise fund. Therefore, the grant has to appear on the income statement as non-operating revenues. Answer (a) is incorrect because contributed capital is not on the income statement. Answers (c) and (d) are wrong because the grant was not generated as part of normal operations.

177. (d) Fund accounting assures that the taxes are recorded in the proper fund and the budgetary restrictions assure that the revenues are expended legally.

178. (d) Since the payment is for last year’s interest, it should not be charged to the interest for the current year, so the debit would be to Fund balance.

179. (b) A state grant would be recorded as Revenue in the capital projects fund and accrued as a Debit to a receivable for $300,000 based on the promise to award the grant from the state. The $450,000 transfer from the general fund would be recorded in the capital projects fund as other financing sources transfers in.

180. (d) Investment trust funds should report a statement of fiduciary net assets and a statement of changes in fiduciary net assets (See page 15-32).

181. (d) Closing Entry:

<table>
<thead>
<tr>
<th>JE Appropriations Control</th>
<th>XX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditures</td>
<td>XX</td>
</tr>
<tr>
<td>Unreserved Fund Balance</td>
<td>XX</td>
</tr>
</tbody>
</table>
182. (a) In a government-wide statement of activities, program revenues include charges for services, operating grants and contributions and capital grants and contributions (see page 15-29). Answers B and C would be incorrect because they would be shown as general revenues. Answer C is incorrect because the proceeds from the sale of the capital asset would not be shown on the statement of activities. The gain or loss on the sale of a capital asset would be disclosed on the statement of activities. (Remember “like a corporation”.) The proceeds from the sale of a capital asset would be shown on the fund-based statement of revenues, expenditures and changes in fund balances.

183. (c) The enterprise fund would use the direct method. As a general rule, all-not-for profit entities using the GASB as GAAP require the use of the direct method.

184. (d) If Nack City meets the following three criteria the painting may be capitalized but is not required and depreciation is not required:
   1. Add to collection and display it.
   2. The display must be in a protected area (protected exhibition area)
   3. If painting is sold, proceeds would be used to acquire other items for its collection.

185. (b) In government-wide statements Wythe County uses the accrued method, therefore the property tax revenue would be the tax levy of $2,000,000 minus the $20,000 estimated uncollectible taxes for a net property tax revenue of $1,980,000. The estimated uncollectible taxes would be the tax levy of $2,000,000 x 1% for a total of $20,000.

186. (a) Harland County is acting as an agent to collect the funds and distributive then to the five municipalities in the county. Therefore the $2,000,000 grant should be recorded in the agency fund.

187. (a). The governmental activities column of the government-wide statements includes all governmental funds and internal service funds that primarily service the governmental funds. Since the debt service fund is a governmental fund it would be included in the governmental activities column. Agency, private-purpose trust and pension trust funds are all fiduciary funds. Fiduciary funds are not reported on government-wide financial statements.

188. (d). A statement of activities in a non-governmental not-for-profit organization is similar to an income statement on for-profit financial statements.
Chapter Fifteen
Solutions to Governmental Accounting Problems

NUMBER 1

<table>
<thead>
<tr>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated revenues</td>
<td>700,000</td>
</tr>
<tr>
<td>Appropriations</td>
<td>660,000</td>
</tr>
<tr>
<td>Appropriations - Operating transfers out</td>
<td>30,000</td>
</tr>
<tr>
<td>Budgetary fund balance</td>
<td>10,000</td>
</tr>
</tbody>
</table>

1. Estimated revenues - dr.
2. Budgetary fund balance - cr.
3. Appropriations - cr.
4. Appropriations - Operating transfers out - cr.
5. Expenditures - Not affected

<table>
<thead>
<tr>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property tax receivable</td>
<td>XX</td>
</tr>
<tr>
<td>Allowance for uncollectibles – current</td>
<td>5,000</td>
</tr>
<tr>
<td>Revenues</td>
<td>XX</td>
</tr>
</tbody>
</table>

The property tax revenues are recorded when levied net of the allowance for uncollectible.

6. Property tax receivable - dr.
7. Bad debt expense - not affected
8. Allowance for uncollectibles - current cr.
9. Revenues - cr.
10. Estimated revenues - not affected

<table>
<thead>
<tr>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encumbrances</td>
<td>XX</td>
</tr>
<tr>
<td>Budgetary fund balance reserved for encumbrances</td>
<td>XX</td>
</tr>
</tbody>
</table>

11. Encumbrances - dr.
12. Budgetary balance reserved for encumbrances - cr.
13. Expenditures - not affected
14. Vouchers payable - not affected
15. Purchases - not affected

<table>
<thead>
<tr>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Budgetary fund balance reserved for encumbrances</td>
<td>XX</td>
</tr>
<tr>
<td>Encumbrances</td>
<td>XX</td>
</tr>
</tbody>
</table>

(2) Expenditures

<table>
<thead>
<tr>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vouchers payable</td>
<td>XX</td>
</tr>
</tbody>
</table>

The reversal of the reserve and the encumbrances is for the estimated purchase order amount. However, the expenditures and vouchers payable is for the actual invoice amount.
16. Encumbrances - cr.
17. Budgetary fund balance reserved for encumbrances - dr.
18. Expenditures - dr.
19. Vouchers payable - cr.
20. Purchases - Not affected

<table>
<thead>
<tr>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
</table>
| Other financial uses/Operating transfers out. | 30,000
| Cash            | 30,000                     |

The transfer of cash out of the general fund to the Library debt service fund is not a transfer in, so there is no "due from" the Library service fund.

21. Residual equity transfer out - not affected. This is an operating transfer.
22. Due from Library debt service fund - not affected
23. Cash - cr.
24. Other financial uses - operating transfers out - dr.
25. Encumbrances - not affected

<table>
<thead>
<tr>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriations</td>
<td>660,000</td>
</tr>
</tbody>
</table>
| Appropriations - operating transfers out | 30,000
| Budgetary fund balance | 10,000
| Estimated revenues | 700,000                    |

Revenues

<table>
<thead>
<tr>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditures</td>
<td>XX</td>
</tr>
</tbody>
</table>
| Other financial uses - operating transfers out | XX
| Unreserved fund balance (PLUG) | XX

The first closing entry reverses the budgetary entry recorded at the beginning of the year. The second entry closes out the actual revenues, expenditures and transfers accounts to unreserved fund balance.

26. Estimated revenues - cr.
27. Budgetary fund balance - dr.
28. Appropriations - dr.
29. Appropriations - dr.
30. Expenditures - cr.
31. Revenues - dr.
32. Other financial uses - operating transfers out - cr.
33. Allowance for uncollectibles - current - not affected
34. Bad debt expense - not affected
35. Depreciation expense - not affected

The allowance account is not closed out since it is a contra account to the property tax receivable account. Neither bad debt expense nor depreciation expense are recorded in the general fund so they would not be affected.

<table>
<thead>
<tr>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
</table>
| (1) Budgetary fund balance reserved for encumbrances | 12,000
| Encumbrances    | 12,000                     |

<table>
<thead>
<tr>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
</table>
| (2) Unreserved fund balance | 12,000
| Fund Balance reserved for encumbrances | 12,000

The first entry reverses the encumbrances entry made at the time the outstanding purchase orders were issued. The second entry establishes the reserve of fund balance for encumbrances.

15S-16
36. Encumbrances - cr.
37. Budgetary fund balance reserved for encumbrances - dr.
38. Unreserved fund balance - dr.
39. Fund balance for encumbrances - cr.

Solution to second part of Problem #1 – Government-wide approach.

Answers 1 – 5 are all “Not Affected.”
Government-wide reporting does not disclose budgetary information.

Answers 6 – 10 – same answers as Fund-based reporting.

Answers 11 – 15 – are all “Not Affected.” The journal entry for the property tax levy is the same for both reporting approaches.

Answers 16 – 20 – Answers 16, 17, 18, 20 would be “Not Affected”. Government-wide statements do not report encumbrances or use the word “expenditures.”
Answer 19 does not change. The journal entry for government-wide statements would be a debit to expense and a credit to vouchers payable.

Answers 21 – 25 – are all “Not Affected.”
Since government-wide financial statements group all governmental funds into one column called Governmental Activities, intra-fund transfers would not be recorded.

Answers 26 – 35 – would all be “Not Affected” except revenues which would be the same (debited) and depreciation expense which would be closed by a credit entry.

Answers 36 – 39 would all be “Not Affected”. Government-wide statements do not record encumbrances.
1. G The entry is to debit cash and credit other financing sources.

2. K Debit encumbrances credit reserve for encumbrances.

3. L Two journal entries are needed. The first is to debit reserve for encumbrance and credit encumbrances. The second is to debit expenditure control and credit to vouchers payable.

4. L Debit expenditures control and credit vouchers payable.

5. E Debit due from other funds, and credit billings.

6. J If the award was accrued, debit deferred revenues, and credit revenues.

7. D Debit expenditure control and credit vouchers payable.

8. A Debit expenditures control and credit vouchers payable.

9. F Debit due from other funds, and credit billings.

10. B See #8. If inflows (Revenues) exceed outflows (Appropriations) credit Budgetary Fund Balance.

11. B All proprietary fund assets are accounted for in the fund.

12. F Capital projects fund are used to account for major construction activities or acquisitions.

13. J Fixed assets are not recorded.

14. J Fixed assets are not recorded.

15. B See #11.

16. G Property tax revenues that are not specifically restricted are accounted for as a General fund revenues.

17. A Agency funds are fiduciary funds. They are accounted in the same manner as governmental fund.

18. J Fixed assets are not recorded.

19. I The purpose for the special revenue fund is to account for revenues specifically marked.

20. H The purpose for the debt service fund is to account for the principal and interest payments on general obligations.
### Fund-Based Financial Statements

1. **General Fund**
   - Estimated Revenues Control 1,700,000
   - Appropriations Control 1,500,000
   - Estimated Other Financing-Uses Control 120,000
   - Budgetary Fund Balance 80,000

2. **General Fund**
   - Property Tax Receivable 1,300,000
   - Allowance for Uncollectible Taxes 39,000
   - Revenues - Property Taxes 1,261,000

3. **General Fund**
   - Encumbrances Control 150,000
   - Fund Balance-Reserved for Encumbrances 150,000

4. **General Fund**
   - Other Financing Uses - Transfers Out 50,000
   - Cash 50,000

### Debt Service Fund

- Cash 50,000
- Other Financing Sources - Transfers In 50,000

5. **Debt Service Fund**
   - Expenditures - Principal 40,000
   - Interest 10,000
   - Cash 50,000

6. **Capital Projects Funds**
   - Cash 2,000,000
   - Other Financing Sources
     - Bonds Proceeds 2,000,000

7. **General Fund**
   - Fund Balance - Reserved for Encumbrances 150,000
   - Encumbrances Control 150,000
   - Expenditures Control 152,000
   - Vouchers Payable 152,000

---

### Government-Wide Financial Statements

- Budgetary entries are not reported within the government-wide financial statements. They are recorded in the individual funds and then shown in required supplementary information.

- Same Journal Entry

- Commitments are not reported in the government-wide financial statements.

- This transfer was within the government funds and would, therefore, have had no net effect on the governmental activities. **No journal entry is needed.**

- Another transfer - **No journal entry is needed.**

- No Journal Entry

---

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<table>
<thead>
<tr>
<th>Fund-Based Financial Statements</th>
<th>Government-Wide Financial Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8. Capital Projects Fund</strong></td>
<td></td>
</tr>
<tr>
<td>Expenditures - Building</td>
<td><strong>Building</strong></td>
</tr>
<tr>
<td>Cash</td>
<td><strong>Cash</strong></td>
</tr>
<tr>
<td>2,000,000</td>
<td>2,000,000</td>
</tr>
<tr>
<td><strong>9. Capital Projects Fund</strong></td>
<td></td>
</tr>
<tr>
<td>No Journal Entry is recorded.</td>
<td><strong>Depreciation Expense</strong></td>
</tr>
<tr>
<td>Expenditures rather than</td>
<td>Accumulated Depreciation</td>
</tr>
<tr>
<td>Expenses are recorded by the</td>
<td>30,000</td>
</tr>
<tr>
<td>governmental funds.</td>
<td>30,000</td>
</tr>
<tr>
<td><strong>10. General Fund</strong></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td><strong>Same Journal Entry</strong></td>
</tr>
<tr>
<td>Tax Anticipation</td>
<td></td>
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<tr>
<td>Note Payable</td>
<td>100,000</td>
</tr>
<tr>
<td><strong>11. Capital Projects Fund</strong></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td><strong>Cash</strong></td>
</tr>
<tr>
<td>80,000</td>
<td>80,000</td>
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<tr>
<td>Other Financing Sources -</td>
<td><strong>Special Assessment</strong></td>
</tr>
<tr>
<td>Special Assessments Note</td>
<td>Notes Payable</td>
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<tr>
<td>80,000</td>
<td>80,000</td>
</tr>
<tr>
<td><strong>12. Capital Projects Funds</strong></td>
<td></td>
</tr>
<tr>
<td>Expenditures–Curbing</td>
<td><strong>Infrastructure Assets</strong></td>
</tr>
<tr>
<td>Cash</td>
<td><strong>Curbing</strong></td>
</tr>
<tr>
<td>80,000</td>
<td>80,000</td>
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<tr>
<td><strong>13. Debt Service Funds</strong></td>
<td></td>
</tr>
<tr>
<td>Taxes Receivable - Special</td>
<td><strong>Same Journal Entry</strong></td>
</tr>
<tr>
<td>Assessment</td>
<td></td>
</tr>
<tr>
<td>Revenues–Special Assessment</td>
<td>85,000</td>
</tr>
<tr>
<td>85,000</td>
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<td><strong>14. Debt Service Funds</strong></td>
<td></td>
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<tr>
<td>Cash</td>
<td><strong>Same Journal Entry</strong></td>
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<tr>
<td>Taxes Receivable–Special</td>
<td>85,000</td>
</tr>
<tr>
<td>Assessment</td>
<td>85,000</td>
</tr>
<tr>
<td>Expenditures–Principal</td>
<td>Spec. Assess. Notes Payable</td>
</tr>
<tr>
<td>80,000</td>
<td>80,000</td>
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<tr>
<td>Expenditures–Interest</td>
<td>Interest Expense</td>
</tr>
<tr>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Cash</td>
<td><strong>Cash</strong></td>
</tr>
<tr>
<td>85,000</td>
<td>85,000</td>
</tr>
<tr>
<td><strong>15. Special Revenue Funds</strong></td>
<td></td>
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<tr>
<td>Cash</td>
<td><strong>Same Journal Entry</strong></td>
</tr>
<tr>
<td>Deferred Revenues</td>
<td>10,000</td>
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<tr>
<td><strong>16. Special Revenue Funds</strong></td>
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</tr>
<tr>
<td>Expenditures - Park Beautification</td>
<td>Expenses-Park Beautification</td>
</tr>
<tr>
<td>Cash</td>
<td><strong>Cash</strong></td>
</tr>
<tr>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Deferred Revenues</td>
<td><strong>Same Journal Entry</strong></td>
</tr>
<tr>
<td>Revenues – Grants</td>
<td>4,000</td>
</tr>
<tr>
<td>4,000</td>
<td>4,000</td>
</tr>
</tbody>
</table>
NUMBER 4

1. $1,000,000. The entries to approve the budget are:

   Estimated Revenue Control  10,000,000
   Other Financing Sources Control – Operating Transfers In  100,000
   Appropriation Control
   Budgetary Fund Balance  1,000,000

2. $9,350,000. The entries for property taxes in Year 6 are as follows:

   Property Taxes Receivable – Current  9,500,000
   Allowance For Uncollectible Taxes – Current  100,000
   Revenues Control  9,400,000
   Cash  9,350,000
   Property Taxes – Delinquent  150,000
   Property Taxes – Current  9,500,000

3. $0-. There is no balance in the fund balance account as shown by the following entries:

   Cash  2,100,000
   Other Financing Sources – Proceeds of Bonds  2,000,000
   Other Financing Sources – Transfers In  100,000
   Expenditures  2,100,000
   Construction Contracts Payable  2,000,000
   Other Financing Sources – Transfers In  100,000
   Other Financing Sources – Proceeds of Bonds  2,000,000
   Other Financing Sources – Transfers In  100,000
   Expenditures  2,100,000

   Because the expenditures equals financing sources, the fund balance is zero.

4. $2,100,000. At the end of each year, expenditures accumulated on capital projects are recorded in the building account.

5. $2,000,000. Debt issued to finance capital projects is included in the GLTD Account Group.
1. A
Expenditures of governmental funds are classified by fund, function (or program), organization unit, activity, character, and object class. Classification by character is on the basis of the fiscal period presumed to be benefited. Expenditures – current services is therefore a character classification because it indicates that the expenditures benefit the current period.

2. A
Expenditures of governmental funds are classified by fund, function (or program), organization unit, activity, character, and object class. Classification by character is on the basis of the fiscal period presumed to be benefited. Expenditures – capital outlay is a classification by character indicating that the expenditure is expected to benefit the current and future periods.

3. B
Classification of governmental fund expenditures by function or program provides information on overall purposes or objectives. A function is a group of activities intended to perform a major service or meet a regulatory responsibility. The item expenditures-health is classified by function.

4. B
A governmental fund recognizes inventories using either the purchase or the consumption method. Under the purchase method, a general fund supplies inventory is considered an expenditure when it is purchased. However, a significant amount of inventory remaining at year-end should be reported on the balance sheet. Recognition of inventory requires a segregation of fund equity similar to the reserve for encumbrances. Thus, the purchase method entry is to debit supplies inventory and credit unreserved fund balance and then to debit unreserved fund balance and credit a reserve for supplies inventory. Under the consumption method, supplies are charged to inventory only when used. Accordingly, the entry to record the ending inventory under this method debits inventory and unreserved fund balance and credits expenditures and reserve for supplies inventory. The effect is to reduce expenditures to the cost of the amount actually used. Shar City must have used the purchase method. The fund balance at January 1, Year 5, was $383,000 ($304,000 unreserved + $79,000 reserved as calculated in question 14). The fund balance at December 31, Year 5, was $238,000 ($43,000 + $38,000 + $157,000). Although residual equity transfers out totaled $190,000, the fund balance decreased by only $145,000 ($383,000 - $238,000). Other factors must therefore have increased fund balance by $45,000 ($190,000 - $145,000). These factors were the $28,000 excess of revenues over expenditures and other financing uses and the $17,000 increase in supplies inventory ($38,000 - $21,000). Under the consumption method, the $17,000 increase in inventory would have been treated as a decrease in expenditures, not as an increase in fund balance. Accordingly, the use of the purchase method requires that the statement of changes in revenue, expenditures, and fund balance include the inventory increase as an other financing source or a fund balance increase. The purpose is to reconcile the beginning and ending fund balance amounts.

5. B
An enterprise fund is a proprietary fund. A proprietary fund's measurement focus is on determination of net income, financial position, and cash flows. Thus, an enterprise fund's accounting system is similar to that for private sector businesses. Its presentation of fund equity should distinguish between contributed equity and retained earnings from operations.

6. A
Long-term liabilities of proprietary funds and trust funds, such as an enterprise fund, are accounted for through those funds.

7. A
Grants recorded in governmental funds, such as the general fund, should be recognized in revenue in the accounting period when they become susceptible to accrual, that is, when they are measurable and available.
8. **E**
Reimbursements are made for expenditures or expenses of one fund that are applicable to another fund. They are recorded as an expenditure or expense of the reimbursing fund and as a reduction in the expenditure or expense of the reimbursed fund. Thus, after reimbursement, the expense for pension contributions is ultimately reflected only in the internal service fund, not in the general fund.

9. **B**
Quasi-external transactions are interfund transactions that do not constitute transfers and are not revenues, expenditures, or expenses of the governmental unit, but they are nevertheless accounted for as revenues, expenditures, or expenses of the funds involved. The reason is that they are of a kind that would be treated as revenues, expenditures, or expenses of the governmental unit if they involved external entities. Examples are payments in lieu of taxes by an enterprise fund to the general fund, internal service fund billings to departments, routine employer contributions to a pension trust fund, and routine service charges for utilities. Accordingly, the payment of utility charges to the enterprise fund is a quasi-external transaction that should be recorded as an expenditure of the general fund.

10. **C**
The subsidy to an enterprise fund is an interfund transaction that is not a loan, a quasi-external transaction, or a reimbursement. Thus, it is a transfer classified as operating transfers. Examples are legally authorized transfers from a fund receiving revenue to the expending fund, operating subsidy transfers from a general fund to an enterprise fund, transfers of tax revenue from a special revenue fund to a debt service fund, and transfers from a general fund to a special revenue or a capital projects fund. Operating transfers are not reported as revenues, expenditures, or expenses. They are reported as other financing sources (uses) in a governmental fund's statement of revenues, expenditures, and changes in fund balance and as operating transfers in a proprietary fund's statement of revenues, expenses, and changes in retained earnings (or equity).

11. **E**
The interfund loan does not meet the criteria for recognition as a revenue, expenditure, or transfer. The receivable recognized by the general fund and the payable recognized by the internal service fund are reported in the combined balance sheet, not in the statement of revenues, expenditures, and changes in fund balances.

12. **C**
Equity transfers are defined as nonrecurring or nonroutine transfers of equity between funds, for example, a contribution of enterprise fund capital by the general fund or a return of such capital. They result in recognition of other financing sources or revenues or of other financing uses or expenditures.

13. **B**
Payment of an amount due under an operating lease (one not meeting the capitalization criteria of SFAS 13) is reported as an expenditure of the period by the general fund (the user fund).

14. **$79,000**
The ending reserve for encumbrances was $43,000 after a decrease of $15,000. Furthermore, beginning supplies inventory was $21,000, an amount that should have been reserved. Thus, the reserved fund balance at the end of Year 4 was $79,000 ($43,000 + $15,000 + $21,000).

15. **$811,000**
The entry to record the tax assessment is to debit a receivable, credit an allowance for uncollectible taxes, and credit revenues. Revenues are given as $825,000. The original credit to the allowance account must have been $28,000 ($20,000 ending balance + $8,000 of writeoffs). Hence, the assessed amount was $853,000 ($825,000 + $28,000). Given that $34,000 was transferred to the delinquent taxes account, the amount collected must have been $811,000 ($853,000 - $34,000 - $8,000 written off).

16. **$89,000**
An expenditure is recorded by a debit to expenditures and a credit to a liability (vouchers payable). Payment of the liability results in a debit. Accordingly, the year-end credit balance of $89,000 in vouchers payable represents amounts due to vendors and contractors.
17. $100,000
The capital outlay of $100,000 for police vehicles by the general fund constitutes an acquisition of general fixed assets. They are accounted for in the Capital Asset Account.

18. $52,000
Given that debt service included $22,000 of interest, the reduction of liabilities reported from Year 5 transactions equals $52,000 ($74,000 of debt service expenditures – $22,000 of interest.)

19. $1,392,000
The actual amounts given in the statement of revenues, expenditures, and changes in fund balance – budget and actual – general and special revenue fund types will differ from those in the statement of revenues, expenditures, and changes in fund balance – all governmental fund types when the legally prescribed budgetary basis is materially different from GAAP. In the case of Shar City's general fund, the budgetary basis includes encumbrances. Accordingly, the budgetary data are not comparable with GAAP-based actual data. To achieve better comparability, the actual expenditures reported in the budgetary comparison statement for Year 6 will include encumbrances remaining at year-end because they relate to the Year 5 appropriation authority reflected in the budgetary amounts. However, the expenditures based on Year 4 expenditure authority that were recognized in Year 5 are excluded. These amounts are not reflected in the budget for Year 5. Thus, total actual expenditures reported in the budgetary comparison statement equal $1,392,000 ($1,349,000 expenditures based on Year 5 expenditure authority + $43,000 reserve for encumbrances at the end of Year 5).

NUMBER 6

1. (N) The recording of budgetary accounts at the beginning of Year 3 has no effect on fund balance. The recording of budgetary accounts would increase budgetary fund balance at the beginning of Year 3. "Actual" fund balance will not change until revenues are recognized and expenditures incurred.

2. (Y) Budgetary accounts are incorporated into the governmental accounting system to provide legislative control over revenues and other resource inflows and expenditures and other resource outflows. Accordingly, budgetary accounts should include estimated revenues, appropriations, estimated other financing sources, estimated other financing uses, and budgetary fund balance.

3. (Y) Nonroutine transfers of equity by a fund should be accounted for as other financing sources. The GASB Codification specifically cites the following examples: contributions of capital to proprietary funds; the subsequent return to the general fund of capital contributed to proprietary funds; and transfers of residual balances of discontinued funds to the general fund or a debt service fund.

4. (N) The general fund did not receive an operating transfer of $30,000. In this problem, as is generally true (i.e., required per the bond indenture), the premium was probably transferred to the debt service fund for future debt service payments.

5. (N) The receipt of water by the general fund (from the water utility fund) represents a quasi-external transaction. These are transactions that would be accounted for as revenues or expenditures/expenses if they involved an external party. The proper accounting is to treat them as revenues in the fund providing the goods or services and as expenditures/expense in the fund receiving the goods or services.

6. (Y or N) The AICPA accepted both answers in this situation. The net property taxes receivable of $370,000 may include amounts expected to be collected after March 15, Year 4. Property taxes, which are expected to be collected after 60 days from the end of the fiscal year, are reported as deferred revenue. This problem does not state when the taxes were levied, and it is not possible to determine from the information given if deferred revenue was recorded.
7. (N) The closing of budgetary accounts has no effect on "actual" fund balance. The journal entry to close budgetary accounts at year end is simply a reverse of the adoption entry:

   Dr. Appropriations control 5,600,000  
   Dr. Budgetary fund balance 400,000  
   Cr. Estimated revenues control 6,000,000

8. (N) The recording of budgeted amounts into budgetary accounts has no effect on actual amounts or "actual" fund balance. As a result of actual amounts recorded in the general fund in 20X4, fund balance will increase by $50,000.

9. (Y) The proprietary funds balance sheet should include all fixed assets.

10. (N) Entities that use proprietary fund accounting should present a statement of cash flows. Public Employee Retirement Systems and pension trust funds are exempt from this requirement, but are not precluded from preparing a statement of cash flows. Governmental fund types should not present a statement of cash flows.

11. (N) See #10 above.

12. (Y) See #10 above.

13. $5,600,000. Appropriations is the budgetary account established at the beginning of the year to provide control over expenditures. The answer is provided in General fund selected information under total expenditures for the budgeted information. Thus, Appropriations is $5,600,000.

14. $4,750,000. The journal entry to record the property taxes receivable is:

   Property taxes receivable 4,750,000
   Allowance for estimated uncollectible taxes 50,000
   Revenues control 4,700,000

   Thus, the actual property tax revenue recorded, which is net of uncollectible taxes, is added to the estimated uncollectible taxes to arrive at the amount debited to property taxes receivable.

15. Answer 0 (zero). The capital projects fund is a governmental fund and governmental funds do not have an account for bonds payable. Reminder: When governmental funds issue bonds, the credit is to other financing courses—bonds proceeds. The bonds payable account is reported on government-wide statements.

16. $2,473,000. The completed cost of the civic center can be calculated by adding the expenditures ($1,080,000) that occurred in Year 3 and the unreserved fund balance ($1,420,000) and subtracting the transfer ($27,000) at the end of the project to the General Fund. The unreserved fund balance at Year 3 year-end is the amount of funds available to be spent on the civic center. The transfer of $27,000 to the General Fund represents the residual amount not spent on the capital project. Thus, when considering the interaction between these accounts, the total completed cost is $2,473,000 ($1,080,000 + 1,420,000 – 27,000).

17. The state capital grant is the $800,000 in revenues listed in the capital projects fund.

18. The total encumbrances would be the expenditures of $1,080,000 plus the $42,000 that the encumbrances exceeded the expenditures plus the $1,300,000 of encumbrances outstanding at December 31, Year 3, for a total of $2,422,000.

19. The unreserved fund balance would be the $1,420,000 from the closing entry in the capital projects fund less the $1,300,000 reserve for encumbrances outstanding at December 31, Year 3, for a net balance of $120,000.
Chapter Sixteen
Not-for-Profit Accounting

SECTION I: PUBLIC (GOVERNMENTALLY OWNED) COLLEGES AND UNIVERSITIES.............. 16-1
   VOLUNTARY HEALTH AND WELFARE ORGANIZATIONS
   AND OTHER NONPROFIT ORGANIZATIONS ................................................................. 16-6

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Chapter Sixteen  
Not-for-Profit Accounting

SECTION I:  
PUBLIC (GOVERNMENTALLY OWNED) COLLEGES AND UNIVERSITIES

SGAS 35 requires that all public colleges and universities adopt the financial reporting model for government-wide statements used by state and local governments as described in SGAS 34 in the previous chapter. This means that most of the colleges will no longer be required to report fund-based statements. There is an exception but we believe that the CPA Exam will concentrate on the majority rule.

An overview of the required disclosures follows along with exhibits for financial statements from SGAS 35.

- Management’s discussion and analysis.
- Institution-wide statement of net assets.
- Institution-wide statement of revenues, expenses and changes in net assets.
- Statement of cash flows (direct method is required).
- Statements will use an economic resources management focus and accrual accounting.
- Infrastructure assets must be reported.
- Capital assets must be depreciated.
- Notes to the financial statements include:

1. Capital assets by type and amount of cost and accumulated depreciation such as land, buildings, infrastructures, etc.

2. Long-term liabilities listing liabilities by type and beginning balance, additions, reductions, ending balance and current portion.

3. Disclosures about collections held by the public institution such as a rare book collection, art collection, coin collection or historical artifacts and whether these collections are capitalized and depreciated.

4. Endowments such as endowments which do not provide specific instructions as to expenditure of the capital appreciation on the assets. The public institution should disclose its policy for handling this capital appreciation and the amount spent, if any, in the current year.

5. Segment information such as revenue-backed bonds used to support residential life or the book store.
Review Exhibits A, B, C, D.

- Notice in Exhibit A that the primary institution is the university and that the university’s hospital is shown as a component unit.

  The restricted assets are divided into two sections: nonexpendable and expendable. An example of a nonexpendable asset is a gift in which the earnings on the principal can be spent but the principal is “nonexpendable”. On an expendable net asset, both the earnings and the principal may be spent.

- On Exhibit B, notice that the title for the statement is Statement of Revenues, Expenses and Changes in Net Assets, which is the same disclosure requirement as an enterprise fund in governmental accounting.

  The operating expenses on the exhibit are reported by object but SGAS 35 allows the disclosures to be by either object or by function.

- On Exhibit C for cash flows, notice that the direct method is required and the cash flows from financing activities are split between noncapital financing activities and capital and related financing activities. The noncapital financing activities include noncapital state appropriations and noncapital gifts and grants such as private gifts for endowment purposes.

  Please note that the interest paid on capital debt and capital leases is shown as a financing activity, whereas, on a corporate-type cash flow statement, all interest paid is considered a part of cash flows from operations.

- Exhibit D is the schedule reporting cash from operations on the indirect method. Remember when an entity reports cash flows using the direct method, a supplemental schedule is required reporting cash from operations using the indirect approach.

Note: Work multiple choice questions for public colleges and universities before moving to the next area.
ABC University
Statement of Net Assets
June 30, Year 5

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>Primary Institution</th>
<th>Component Unit Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$4,571,218</td>
<td>$977,694</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>15,278,981</td>
<td>2,248,884</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>6,412,520</td>
<td>9,529,196</td>
</tr>
<tr>
<td>Inventories</td>
<td>585,874</td>
<td>1,268,045</td>
</tr>
<tr>
<td>Deposit with bond trustee</td>
<td>4,254,341</td>
<td>—</td>
</tr>
<tr>
<td>Notes and mortgages receivable, net</td>
<td>359,175</td>
<td>—</td>
</tr>
<tr>
<td>Other assets</td>
<td>432,263</td>
<td>426,427</td>
</tr>
<tr>
<td>Total current assets</td>
<td>$31,894,372</td>
<td>$14,450,246</td>
</tr>
</tbody>
</table>

Noncurrent assets:

| Restricted cash and cash equivalents | 24,200 | 18,500 |
| Endowment investments               | 21,548,723 | — |
| Notes and mortgages receivable, net | 2,035,323 | — |
| Other long-term investments         | —       | 6,441,710 |
| Investments in real estate          | 6,426,555 | — |
| Capital assets, net (Note 1)        | 158,977,329 | 32,602,940 |
| Total noncurrent assets              | 189,012,130 | 39,063,150 |
| Total assets                         | $220,906,502 | $53,513,396 |

LIABILITIES

| Current liabilities:               |                    |                        |
| Accounts payable and accrued liabilities | 4,897,470 | 2,911,419 |
| Deferred revenue                    | 3,070,213         | —                      |
| Long-term liabilities—current portion (Note 2) | 4,082,486 | 989,321 |
| Total current liabilities           | $12,050,169       | $3,900,740             |

Noncurrent liabilities:

| Deposits                           | 1,124,128         | —                      |
| Deferred revenue                    | 1,500,000         | —                      |
| Long-term liabilities (Note 2)      | 31,611,427        | 2,194,236              |
| Total noncurrent liabilities        | $34,235,555       | $2,194,236             |
| Total liabilities                   | $36,256,724       | $6,094,976             |

NET ASSETS

| Invested in capital assets, net of related debt | 126,861,400 | 32,199,938 |

Restricted for:

| Nonexpendable:                      |                    |                        |
| Scholarships and fellowships        | 10,839,473         | —                      |
| Research                           | 3,767,564          | 2,286,865              |

Expendable:

| Scholarships and fellowships        | 2,803,756          | —                      |
| Research                           | 5,202,732          | —                      |
| Instructional department uses      | 938,571            | —                      |
| Loans                              | 2,417,101          | —                      |
| Capital projects                   | 4,952,101          | 913,758                |
| Debt service                        | 4,254,341          | 152,947                |
| Other                              | 403,632            | —                      |
| Unrestricted                        | 12,180,107         | 11,864,912             |
| Total net assets                    | $174,820,778       | $47,418,420            |

SOURCE: SGAS 35, Page 27
EXHIBIT B

ABC University
Statement of Revenues, Expenses, and Changes in Net Assets
For the Year Ended June 30, Year 5

<table>
<thead>
<tr>
<th>REVENUES</th>
<th>Primary Institution</th>
<th>Component Unit Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating revenues:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student tuition and fees (net of scholarship allowances of $3,214,454)</td>
<td>$36,913,194</td>
<td>$</td>
</tr>
<tr>
<td>Patient services (net of charity care of $5,114,352)</td>
<td>—</td>
<td>46,296,957</td>
</tr>
<tr>
<td>Federal grants and contracts</td>
<td>10,614,660</td>
<td>—</td>
</tr>
<tr>
<td>State and local grants and contracts</td>
<td>3,036,953</td>
<td>7,475,987</td>
</tr>
<tr>
<td>Nongovernmental grants and contracts</td>
<td>873,740</td>
<td>—</td>
</tr>
<tr>
<td>Sales and services of educational departments</td>
<td>19,802</td>
<td>—</td>
</tr>
<tr>
<td>Auxiliary enterprises:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential life (net of scholarship allowances of $428,641)</td>
<td>28,079,274</td>
<td>—</td>
</tr>
<tr>
<td>Bookstore (net of scholarship allowances of $166,279)</td>
<td>9,092,363</td>
<td>—</td>
</tr>
<tr>
<td>Other operating revenues</td>
<td>143,357</td>
<td>421,571</td>
</tr>
<tr>
<td>Total operating revenues</td>
<td>88,773,343</td>
<td>54,194,515</td>
</tr>
</tbody>
</table>

| EXPENSES | | |
| Operating expenses: | | |
| Salaries: | | |
| Faculty (physicians for the hospital) | 34,829,499 | 16,703,805 |
| Exempt staff | 29,597,676 | 8,209,882 |
| Nonexempt wages | 5,913,762 | 2,065,267 |
| Benefits | 18,486,559 | 7,752,067 |
| Scholarships and fellowships | 3,809,374 | — |
| Utilities | 16,463,492 | 9,121,352 |
| Supplies and other services | 12,451,064 | 7,342,009 |
| Depreciation | 6,847,377 | 2,976,212 |
| Total operating expenses | 128,398,803 | 54,170,594 |
| Operating income (loss) | (39,625,460) | 23,921 |

| NONOPERATING REVENUES (EXPENSES) | | |
| State appropriations | 39,760,508 | — |
| Gifts | 1,822,442 | — |
| Investment income (net of investment expense of $87,316 for the primary institution and $19,823 for the hospital) | 2,182,921 | 495,594 |
| Interest on capital asset-related debt | (1,330,128) | (34,538) |
| Other nonoperating revenues | 313,001 | 321,449 |
| Net nonoperating revenues | 42,748,746 | 782,505 |
| Income before other revenues, expenses, gains, or losses | 3,123,286 | 806,425 |
| Capital appropriations | 2,075,750 | — |
| Capital grants and gifts | 690,813 | 711,619 |
| Additions to permanent endowments | 85,203 | — |
| Increase in net assets | 5,975,052 | 1,518,045 |

| NET ASSETS | | |
| Net assets—beginning of year | 168,645,726 | 45,900,375 |
| Net assets—end of year | $174,620,778 | $47,418,420 |

SOURCE: SGAS 35, Page 28
EXHIBIT C
ABC University
Statement of Cash Flows
For the Year Ended June 30, Year 5

<table>
<thead>
<tr>
<th>CASH FLOWS FROM OPERATING ACTIVITIES</th>
<th>Primary Institution</th>
<th>Component Unit Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and fees</td>
<td>$33,628,945</td>
<td>$</td>
</tr>
<tr>
<td>Research grants and contracts</td>
<td>13,884,747</td>
<td></td>
</tr>
<tr>
<td>Payments from insurance and patients</td>
<td>18,582,530</td>
<td></td>
</tr>
<tr>
<td>Medicaid and Medicare</td>
<td>31,640,524</td>
<td></td>
</tr>
<tr>
<td>Payments to suppliers</td>
<td>(28,175,500)</td>
<td>(13,084,643)</td>
</tr>
<tr>
<td>Payments to employees</td>
<td>(87,233,881)</td>
<td>(32,988,044)</td>
</tr>
<tr>
<td>Loans issued to students and employees</td>
<td>(384,628)</td>
<td></td>
</tr>
<tr>
<td>Collection of loans to students and employees</td>
<td>291,642</td>
<td></td>
</tr>
<tr>
<td>Auxiliary enterprise charges:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residence halls</td>
<td>28,327,644</td>
<td></td>
</tr>
<tr>
<td>Bookstore</td>
<td>8,463,939</td>
<td></td>
</tr>
<tr>
<td>Other receipts (payments)</td>
<td>1,415,502</td>
<td>(997,502)</td>
</tr>
<tr>
<td>Net cash provided (used) by operating activities</td>
<td>(31,781,590)</td>
<td>3,152,865</td>
</tr>
</tbody>
</table>

| CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES   |                     |                         |
| State appropriations                              | 39,388,534          |                         |
| Gifts and grants received for other than capital purposes: |     |                         |
| Private gifts for endowment purposes              | 85,203              |                         |
| Net cash flows provided by noncapital financing activities | 39,473,737          |                         |

| CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES | | |
| Proceeds from capital debt                        | 4,125,000           |                         |
| Capital appropriations                             | 1,918,750           |                         |
| Capital grants and gifts received                  | 640,813             | 711,619                 |
| Proceeds from sale of capital assets               | 22,335              | 5,066                   |
| Purchases of capital assets                        | (8,420,247)         | (1,950,410)             |
| Principal paid on capital debt and lease           | (3,788,102)         | (134,095)               |
| Interest paid on capital debt and lease            | (1,330,126)         | (34,538)                |
| Net cash used by capital and related financing activities | (6,831,577)         | (1,402,358)             |

| CASH FLOWS FROM INVESTING ACTIVITIES              |                     |                         |
| Proceeds from sales and maturities of investments | 16,741,252          | 2,843,124               |
| Interest on investments                           | 2,111,597           | 70,501                  |
| Purchase of investments                           | (17,680,113)        | (4,546,278)             |
| Net cash provided (used) by investing activities  | 1,172,736           | (1,632,553)             |
| Net increase in cash                              | 2,033,306           | 117,854                 |
| Cash—beginning of year                            | 2,562,112           | 878,340                 |
| Cash—end of year                                  | $4,595,418          | $996,194                |

SOURCE: SGAS 35, Page 29
Voluntary Health and Welfare Organizations, and Other Nonprofit Organizations, are entities which provide services to the public made possible by the generosity of the public contributions. These organizations are accountable to the community for their administration and policies. Included in this category are United Way, YMCA, religious, research and scientific organizations, public broadcasting stations, private and community foundations, museums and other cultural institutions, performing arts, libraries, zoological and botanical societies, political parties, cemetery, civic, fraternal, labor unions, professional and trade associations, private elementary schools, and social and country clubs.

SOP 78-10, Accounting Principles and Reporting Practices for Certain Nonprofit Organizations, recommends financial principles and reporting practices for nonprofit organizations for which there are no audit guides. This SOP does not apply to organizations that are primarily commercial businesses operated to benefit their members or stockholders, such as farm cooperatives, employee benefit and pension plans, trusts, mutual banks, and mutual insurance companies.

Public voluntary health and welfare organizations follow GASB pronouncements and private voluntary health and welfare organizations follow FASB principals.

Two unique aspects of voluntary health and welfare reporting are the use of the word “support” rather than revenue for contributions received, and the division of its functional expenses between program services and supporting services. Program services are the unique services associated with the organization and supporting services are costs that support the programs such as management and general expenses, cost of fundraising and membership development.
SECTION II: PRIVATE NOT-FOR-PROFIT ORGANIZATIONS

STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 116

Applies to all Nongovernmental Nonprofits

Contributions of Cash or Other Assets

SFAS 116 establishes standards of accounting and reporting for contributions. It applies to all organizations that receive or make contributions; therefore, it affects hospitals, universities, businesses, individuals, and any other entities which make or receive contributions. SFAS 116 defines a contribution as "an unconditional transfer of cash or other assets to an entity or settlement or cancellation of its liabilities in a voluntary non-reciprocal transfer by another entity acting other than as an owner."

This is consistent with earlier definitions; however, SFAS 116 continues, "Other assets include [...] unconditional promises to give those items in the future." Thus SFAS 116 introduces the requirement that contributions be recognized as revenue (support) at fair market value on the date the unconditional promise to give occurs.

The definition of a promise to give is, "a written or oral agreement to contribute cash or other assets to another entity; however, to be recognized in financial statements there must be sufficient evidence in the form of verifiable documentation that a promise was made and received." Therefore, if an unconditional promise to give is received in public with witnesses or in writing, the organization is required to record the support and an amount receivable for the promise. Prior to SFAS 116, these promises were not recorded in the financial statements because they are not legally enforceable.

An allowance for uncollectible support is appropriate and advisable. With the advent of SFAS 116, not-for-profits will now report on a full accrual basis.

Contributed Services

Under SFAS 116, contributed services are "recognized if the services received
• create or enhance nonfinancial assets or
• require specialized skills, are provided by individuals possessing those skills, and would typically need to be purchased if not provided by donation."

No other contributed services can be recognized.

Contributed Works of Art, etc.

Contributed collections of works of art, historical treasures, or similar assets need not be capitalized and recognized as revenue if they meet all of the following conditions:
• Are held for public exhibition, education, or research in furtherance of public service rather than financial gain.
• Are protected, kept unencumbered, cared for, and preserved.
• Are subject to an organizational policy that requires the proceeds from sales of collection items to be used to acquire other items for collections.

Contributions

SFAS 116 makes a distinction between three types of contributions based solely upon the donor's instructions. Promises to give fall into three categories:
• unrestricted
• temporarily restricted
• permanently restricted
Unrestricted support is available for the organization to use immediately and for any purpose. Temporarily restricted support is restricted by the donor in such a way that availability of the support is dependent upon the happening of some event, the performance of a task, or the passage of time. Such support is available to the organization when the event occurs, the task is performed, or the time restraint passes. At that time, the support is reclassified from temporarily restricted to unrestricted and the support is available for use. Permanently restricted funds are those which the donor restricts in such a way that the organization will never be able to use the support itself. The organization may be able to use the income from the gift, but never the gift itself.

**Unconditional Pledges (promises to give)**

Not-for Profit entities recognize unconditional promises to give as both a receivable and contribution revenue or support in the year made. For example: Look at a recently release question from the computer-based CPA exam:

During current year, a voluntary health and welfare organization receives $300,000 in unrestricted pledges. Of this amount, $100,000 has been designated by donors for use next year to support operations. If 15% of the unrestricted pledges are expected to be uncollectible, what amount of unrestricted support should the organization recognize in its current-year financial statements?

A. $300,000  
B. $270,000  
C. $200,000  
D. $170,000  

D. Solution

Since the voluntary health and welfare organizations use the accrual method, the pledges less the uncollectible portion should be recorded as support. Of the $300,000 in pledges received, $100,000 includes a time restriction and should be listed in temporarily restricted support. The other $200,000 less the uncollectible portion ($200,000 x 15% = $30,000) or $170,000 should be reported as unrestricted support. Technically, the $100,000 listed in temporarily restricted should be shown at present value.

**Conditional pledges**

Conditional pledges are not recognized as revenue until the conditions on which they depend are substantially met. For example, William Hobbs, an alumnus of Guil College’s promises to donate $25,000 to the Accounting Department of Guil Colleges if his favorite professor from ten years ago, who is now teaching at Cataba University, is hired as the new chair of accounting department at Guil College. Since the condition to hire the professor has not been met, Guil College would not record the pledge as either a receivable or as contribution revenue.

But what if Hobbs is so excited about the possibility of his old professor being hired as Chair of the Accounting Department, he sends a check for $25,000 as a donation to the Guil College Accounting Department with the stipulation that the college can keep the money if his old professor is hired. In this situation the college would debit its cash account and credit a liability account called refundable advance. If the college does not hire the professor, the college must return the money to Mr. Hobbs. However, if the professor is hired, the college would debit the refundable advance account and recognize the contribution revenue.

**Donations other than cash**

A number of voluntary health and welfare organizations receive donations other the cash and distribute them to the needy. For example, Community Services received the following donations in which it estimates their Fair Value.

<table>
<thead>
<tr>
<th>Item</th>
<th>Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ford Mustang</td>
<td>$2,500</td>
</tr>
<tr>
<td>Stove</td>
<td>200</td>
</tr>
<tr>
<td>Refrigerator</td>
<td>300</td>
</tr>
</tbody>
</table>

Total Fair Value $3,000
On receipt of the donation Community Services would debit Inventory of Donated Materials and credit contribution revenue for $3,000. When the donated items are distributed the organization would make the following entry:

JE Expense – Assistance to Needy 3,000
Inventory of Donated Materials 3,000

STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 117

Applies to all Nongovernmental Nonprofits
SFAS 117 establishes standards for not-for-profit organizations general-purpose external statements and designates the statement of financial position, the statement of activities, the statement of cash flows and the accompanying notes as a complete set of financial statements. The Statement of Financial Position is required to show total assets, total liabilities, and net assets. Following the lead of SFAS 116, SFAS 117 requires reporting of unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets. The standard also requires that the statement of activities report the changes in net assets for each of the three categories of support separately. The Statement of Cash Flows can be reported under the direct or indirect method, with the change in net assets being the equivalent of net income. Aggregation and order of presentation should, generally, be similar to those of a business enterprise.

Not-for-profit organizations must present in the financial statements all information required by GAAP (unless specifically exempted) and all information required by specialized principles. This information includes display and disclosure provisions of:
- Accounting changes
- Financial instruments
- Extraordinary, unusual and infrequent events
- Loss contingencies

For the Statement of Cash Flows, the Statement of Activities takes the place of the Income Statement in a business enterprise and change in net assets takes the place of net income. Restricted resources that are used for long-term purposes because of donor stipulation are classified as financing activities.

Revenue, Support and Capital
The primary sources and amounts of revenue, support, and capital funds should be disclosed in the statement of activity. Capital additions restricted for plant assets should be shown as deferred capital support in the balance sheet until they are used.

Current restricted funds should be reported as revenue and support to the extent that expenses conforming to the grantor’s restrictions have been incurred. Any remaining funds should be reported as deferred revenue or support in the balance sheet until the restrictions are met and the expenses incurred. Unrestricted funds are reported in the unrestricted fund. Legally enforceable pledges should be reported as assets at the estimated realizable value and should be recognized as support when so designated by the donor. If that designation occurs after the balance sheet date, these pledges would be shown as deferred support in the balance sheet. If no designation is made, pledges should be reported when they are expected to be received. Revenue from the sale of goods or services is recognized when goods are sold or services are performed. Revenue from membership dues should be allocated over the dues period.

Donated Material and Services
The method used to value, record, and report donated services should be disclosed in the financial statements. Furthermore, recorded services should be distinguished from unrecorded services.

Expenses
Expenses should be identified by function unless another basis would be useful to the users of the financial statement. Expenses for specific program services and for supporting services such as management and general
costs and fund-raising costs should be presented separately for each significant program or activity such as fund-raising, membership development, and unallocated management and general expenses.

Classification of expenditure by type may be presented also. Costs which are attributable to more than one function should be allocated on a reasonable basis.

An expense and a liability should be reported when grant recipients are entitled to receive the grant. Grants to be made over several years should be reported in the year the grant is first made, unless the grantor retains the right to revoke the grant or unless grants are subject to periodic renewal.

**Depreciation**
Depreciation should be recognized. SFAS 93 also requires the disclosure of depreciation expense, balances of the major classes of depreciable assets, accumulated depreciation at the balance sheet date, and a description of the depreciation method used.

**Tax Allocation**
Interperiod tax allocations should be made when temporary differences occur with respect to federal or state income taxes or federal excise taxes.

**Fund Accounting**
Although fund accounting has not been required by the AICPA guides on not-for-profit organizations, it is used by many such organizations in preparing their annual financial statements. Often accounts are grouped into funds through calculations outside of the accounting system.

While SFAS No. 117 does not prohibit using fund accounting, it does require providing information about the three classes of net assets mentioned above:
- unrestricted
- temporarily unrestricted
- permanently restricted

(Internal restrictions of net assets, such as board designations, may be disclosed; however, they are considered to be unrestricted.)

Fund accounting may not accomplish the goal of informing the reader about donor restrictions. As an example, some of the net assets of a fund established to account for property and equipment may be unrestricted, either because they were acquired with unrestricted support or because the donor restriction was satisfied when specified equipment was purchased. Therefore, merely accounting for property and equipment in a separate fund would not satisfy the disclosure requirements about donor restrictions.

**Financially Interrelated Organizations**
A combined financial statement should be used when one organization controls another and any of the following exist:
- An organization solicits funds for the reporting organization and the donor intends or requires the funds to be transferred or used by the reporting organization.
- An organization receives resources from the reporting organization to be used for the reporting organization.
- An organization, funded by nonpublic contributions, is assigned responsibilities by the reporting organization.

Disclosure of the basis for the combination is required. The combined financial statement should include all resources of the related organization. Organizations which are affiliated, but do not meet the requirements for combination, should be disclosed.
Statement of Financial Position

According to paragraph 11 of SFAS No. 117, a statement of financial position should provide information about liquidity, financial flexibility, and the interrelationship of assets and liabilities. **Liquidity** is the nearness to cash of an asset or liability, and **financial flexibility** is the ability to take effective actions to alter amounts and timing of cash flows to respond to unexpected needs and opportunities. SFAS No. 117 requires using one or more of the following methods of presenting information about liquidity. They also might be used to provide information about financial flexibility:

- Sequencing assets according to their nearness to conversion to cash and sequencing liabilities according to the nearness of their maturity and resulting use of cash.
- Classifying assets and liabilities as current and noncurrent following the requirements of ARB No. 43.
- Disclosing in the notes to the financial statements relevant information about liquidity, including restrictions on the use of particular assets.

Sequencing assets and liabilities may require separating some items. The listing of assets may start with unrestricted cash, but cash that is restricted to current operating needs and cash that is restricted to the payment of long-term notes may be farther down the list. Promises to give may appear two or more times depending on whether the proceeds from some of them are restricted by the donors.

Presenting a classified statement of financial position for a not-for-profit organization requires some considerations that normally are not required for nonpublic commercial entities. Cash and promises to give that the donor has restricted to the payment of a long-term note are excluded from current assets. Similarly, all of the principal outstanding under a long-term note is classified as noncurrent if noncurrent assets will be used to liquidate it.

Information about restricted assets may be provided through financial statement captions, such as **cash restricted to operations** and **cash restricted to payment of long-term notes**, or through discussions in the notes to the financial statement.

---

**Lambers Social Club**

**Statements of Financial Position**

**June 30, Year 6 and Year 5**

**(in thousands)**

<table>
<thead>
<tr>
<th></th>
<th>Year 6</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$ 75</td>
<td>$ 460</td>
</tr>
<tr>
<td>Accounts and interest receivable</td>
<td>2,130</td>
<td>1,670</td>
</tr>
<tr>
<td>Inventories and prepaid expenses</td>
<td>610</td>
<td>1,000</td>
</tr>
<tr>
<td>Contributions receivable</td>
<td>3,025</td>
<td>2,700</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>1,400</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Assets restricted</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in land, buildings, and equipment</td>
<td>5,210</td>
<td>4,560</td>
</tr>
<tr>
<td>Land, buildings, and equipment</td>
<td>61,700</td>
<td>63,590</td>
</tr>
<tr>
<td>Long-term investments</td>
<td>218,070</td>
<td>203,500</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>$292,220</td>
<td>$278,480</td>
</tr>
</tbody>
</table>

|                      |          |          |
| **Liabilities and net assets:** |          |          |
| Accounts payable     | $ 2,570  | $ 1,050  |
| Refundable advance   |           | 650      |
| Grants payable       | 875       | 1,300    |
| Notes payable        |           | 1,140    |
| Annuity obligations  | 1,685     | 1,700    |
| Long-term debt       | 5,500     | 6,500    |
| **Total Liabilities**| 10,630    | 12,340   |

|                      |          |          |
| **Net assets:**      |          |          |
| Unrestricted         | 115,228  | 103,670  |
| Temporarily restricted (Note B) | 24,342   | 25,470   |
| Permanently restricted (Note C) | 142,020  | 137,000  |
| **Total net assets** | 281,590  | 266,140  |
| **Total liabilities and net assets** | $292,220 | $278,480 |

16-11
Statement of Activity

The statement of activity is designed to provide information about changes in the organization's net assets. Paragraph 18 of SFAS No. 117 requires using a caption such as change in net assets or change in equity to designate the change. While the total net assets at the beginning and end of the period must be shown, there is no requirement for the statement to present a net change amount for each category of assets.

Information about the changes in the three categories of net assets—unrestricted, temporarily restricted, and permanently restricted—may be provided using a multi-column format or a layered format. Comparative presentations are more easily accommodated by a layered approach.

The order in which items are presented in the statement of activity is flexible. The most common format will be one that presents two groupings, increases in net assets and decreases in them, which is similar to the single-step approach to the income statement used by commercial enterprises. Multiple-step approaches also are acceptable and may be more appropriate when revenue-producing activities are significant to the organization's results of operations.

Netting Expenses and Support. Many not-for-profit organizations hold special events as a fund-raising technique. Practice currently nets expenses of those events against the proceeds, with the net amount reported as support. Under SFAS No. 117, that practice no longer will be acceptable; instead, gross amounts must be reported. Netting is permitted only for incidental transactions, such as a gain on the sale of equipment.

Expenses are reported on the statement of activities by function. For example, on Format 1 & Format 2 that follow, the expenses are classified by program, management and general, and fund raising. These areas are considered functions.

Statement of Functional Expenses. Voluntary health and welfare organizations are required to continue providing a statement of functional expenses which shows how the natural expense classifications are allocated to the significant program and supporting services. For example, the program expenses shown by function would be divided into expenses by object. The statement would have a column labeled program expenses and under the column the expenses would be listed by their natural (object) classification such as salaries, benefits, depreciation, etc. While other not-for-profit organizations are encouraged to present information about natural expense classifications, they only are required to present information about expenses by their functional classifications.

SFAS No. 117 suggests providing information about support by functional classifications as well. This information would be useful because readers of the financial statements can assess the financial effect of adding or deleting program services. While a variety of ways can be used to present the information, a useful technique is to disclose support restricted for individual programs, either on the face of the statement of activity or in a related note. An internal allocation of unrestricted support to the programs normally is not necessary unless the organization believes the program affects it.

SFAS 117 offers multiple formats for the Statement of Activities. We present here two of them. Format 1 is a layered presentation which would be necessary to report multiple periods and allow comparative statements. Format 2 is a columnar format which is easy to read and would be easily understood by most readers. Either format is acceptable, as are others. Note in both presentations that expenses are reported by program with managerial and fund raising expenses disclosed separately.
## Lambers Social Club
### Statement of Activities
#### Year Ended June 30, Year 6
##### (in thousands)

**Changes in unrestricted net assets:**

**Revenues and gains:**
- Contributions: $8,640
- Fees: 5,400
- Income on long-term investments (Note E): 5,600
- Other investment income (Note E): 850
- Net unrealized and realized gains on long-term investments (Note E): 8,228
- Other: 150
  - **Total unrestricted revenues and gains:** 28,868

**Net assets released from restrictions (Note D):**
- Satisfaction of program restrictions: 11,990
- Satisfaction of equipment acquisition restrictions: 1,500
- Expiration of time restrictions: 1,250
  - **Total net assets released from restrictions:** 14,740

**Total unrestricted revenues, gains, and other support:** 43,608

**Expenses and losses:**
- Program A: 13,100
- Program B: 8,540
- Program C: 5,760
- Management and general: 2,420
- Fund raising: 2,150
  - **Total expenses (Note F):** 31,970
- Fire loss: 80
  - **Total expenses and losses:** 32,050

**Increase in unrestricted net assets:**
- **Increase in unrestricted net assets:** 11,558

**Changes in temporarily restricted net assets:**
- Contributions: 8,110
- Income on long-term investments (Note E): 2,580
- Net unrealized and realized gains on long-term investments (Note E): 2,952
- Actuarial loss on annuity obligations: (30)
  - **Net assets released from restrictions (Note D):** (14,740)
  - **Decrease in temporarily restricted net assets:** (1,128)

**Changes in permanently restricted net assets:**
- Contributions: 280
- Income on long-term investments (Note E): 120
- Net unrealized and realized gains on long-term investments (Note E): 4,620
  - **Increase in permanently restricted net assets:** 5,020

**Increase in net assets:**
- 15,450

**Net assets at beginning of year:** 266,140

**Net assets at end of year:** $281,590
### Lambers Social Club
#### Statement of Activities
##### Year Ended June 30, Year 6
(in thousands)

<table>
<thead>
<tr>
<th></th>
<th>Unrestricted</th>
<th>Temporarily Restricted</th>
<th>Permanently Restricted</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues, gains, and other support:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributions</td>
<td>$8,640</td>
<td>$8,110</td>
<td>$280</td>
<td>$17,030</td>
</tr>
<tr>
<td>Fees</td>
<td>5,400</td>
<td></td>
<td></td>
<td>5,400</td>
</tr>
<tr>
<td>Income on long-term investments (Note E)</td>
<td>5,600</td>
<td>2,580</td>
<td>120</td>
<td>8,300</td>
</tr>
<tr>
<td>Other investment income (Note E)</td>
<td>850</td>
<td></td>
<td></td>
<td>850</td>
</tr>
<tr>
<td>Net unrealized and realized gains on long-term investments (Note E)</td>
<td>8,228</td>
<td>2,952</td>
<td>4,620</td>
<td>15,800</td>
</tr>
<tr>
<td>Other</td>
<td>150</td>
<td></td>
<td></td>
<td>150</td>
</tr>
<tr>
<td><strong>Total revenues, gains, and other support</strong></td>
<td><strong>43,608</strong></td>
<td><strong>(1,098)</strong></td>
<td><strong>5,020</strong></td>
<td><strong>47,530</strong></td>
</tr>
<tr>
<td><strong>Expenses and losses:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program A</td>
<td>13,100</td>
<td></td>
<td></td>
<td>13,100</td>
</tr>
<tr>
<td>Program B</td>
<td>8,540</td>
<td></td>
<td></td>
<td>8,540</td>
</tr>
<tr>
<td>Program C</td>
<td>5,760</td>
<td></td>
<td></td>
<td>5,760</td>
</tr>
<tr>
<td>Management and general</td>
<td>2,420</td>
<td></td>
<td></td>
<td>2,420</td>
</tr>
<tr>
<td>Fund raising</td>
<td>2,150</td>
<td></td>
<td></td>
<td>2,150</td>
</tr>
<tr>
<td><strong>Total expenses (Note F)</strong></td>
<td><strong>31,970</strong></td>
<td></td>
<td></td>
<td>31,970</td>
</tr>
<tr>
<td>Fire loss</td>
<td>80</td>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td>Actuarial loss on annuity obligations</td>
<td>32,050</td>
<td>30</td>
<td></td>
<td>32,080</td>
</tr>
<tr>
<td><strong>Total expenses and losses</strong></td>
<td><strong>32,080</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in net assets</td>
<td>11,558</td>
<td>(1,128)</td>
<td>5,020</td>
<td>15,450</td>
</tr>
<tr>
<td>Net assets at beginning of year</td>
<td>103,670</td>
<td>25,470</td>
<td>137,000</td>
<td>266,140</td>
</tr>
<tr>
<td>Net assets at end of year</td>
<td><strong>$115,228</strong></td>
<td><strong>$24,342</strong></td>
<td><strong>$142,020</strong></td>
<td><strong>$281,590</strong></td>
</tr>
</tbody>
</table>
Statement of Cash Flows
A statement of cash flows, prepared following the requirements of SFAS No. 95, is a part of the basic financial statements once SFAS No. 117 is adopted. In general, SFAS No. 117 modifies SFAS No. 95 only to extend its requirements to financial statements of not-for-profit organizations and to address whether some transactions are operating, investing, or financing activities.

Although the statement of financial position is required to disclose the three categories of net assets and the statement of activity is required to disclose the changes in them, no distinction is required to be made in the statement of cash flows.

When the indirect method is used to present cash flows from operating activities, the statement begins with the change in total net assets for the reporting period. Adjustments of that to derive the cash effect remove noncash items, such as changes in unconditional promises to give; items that are to be presented as investing or financing activities, such as receipts from contributions for constructing a building; and items that are to be disclosed as noncash investing and financing activities, such as in-kind contributions.

SFAS 124 – Accounting for Certain Investments Held by Not-For-Profit Organizations

This statement requires fair value accounting for most equity and debt investments held by not-for-profit organizations and requires the reporting of realized and unrealized gains and losses on the Statement of Activities.

An exception is when a not-for-profit organization exercises significant influence over the operating and financing policies of the investee company. In this case, the institution would use the equity method as required by APB #18.

STOP! REVIEW M/C 15 – 52 AND PROBLEMS 1 & 2.

HEALTH CARE ORGANIZATIONS

Examples of Health Care Organizations are clinics, medical group practices, individual practice associations, individual practitioners, emergency care facilities, laboratories, surgery centers, other ambulatory care organizations, continuing care retirement communities, health maintenance organizations, home health agencies, hospitals, nursing homes, and rehabilitation centers.

Most questions and problems from this area focus on hospitals. Hospitals were discussed in Chapter 15 as enterprise funds of state and local governments and would follow SGAS 34. At the beginning of this chapter, hospitals were discussed as being component units of universities and would follow SGAS 35. In the previous section of this chapter hospitals were discussed as private not-for-profits and would follow the reporting requirements of SFAS 116 and 117. Given the diversity in requirements, the AICPA issued its AICPA Audit and Accounting Guide: Health Care Organizations in order to promote some consistency in reporting requirements. The CPA Exam seems to focus on this audit guide.
Listed below are the major points associated with the audit guide:

- Health care organizations may be investor owned Health Care Enterprises (SFAS 116, 117), private not-for-profit entities (SFAS 116, 117), and governmental health care organizations (SGAS 34, 35).

- Financial statements include four basic financial statements:
  3. Statement of Changes in Equity or Net Assets or Fund Balance

- Health care organizations, except for continuing care retirement communities, are to present a classified balance sheet, with current assets and current liabilities shown separately. Continuing care retirement communities may sequence assets in terms of nearness to cash and liabilities in accordance with the maturity date.

- Accrual accounting is used for the recognition of revenues and expenses.

- The statement of operations should provide a performance indicator such as operating income, revenue over expenses, etc. The institution should disclose the policy used by the health care entity for determining its performance indicator.

- Expenses may be reported by function or by natural classification (object). However, if the institution reports expenses by the natural classification, a supplemental schedule must be provided to list expenses by function.

- Depreciation, interest and bad debt expenses are reported along with disclosures by function.

- Patient service revenue is reported as net patient revenue. Net patient service revenue is calculated by deducting contractual adjustments and other adjustments such as hospital employee discounts from gross patient service revenue. The amounts of contractual amounts adjustments and descriptions of the types of adjustments must be disclosed in the footnotes.

- Patient service revenue does not include charity care. Management’s policy for providing charity care and the level of charity care provided should be disclosed in the notes.

- Capitation agreements, which are revenues from third parties based on the number of employees covered instead of services performed, should be shown separately on the statement of operations. The audit guide example (Exhibit E) lists them as premium revenue on the line below net patient revenue.

Review Exhibits E & F for content and format. Note on the statement of operations in the unrestricted revenues, gains and other support section that the revenues are divided between net patient revenue, premium revenue (capitation agreements) and other revenue. The expenses are disclosed by object so a supplemental schedule by function must be presented. The operating expenses would be broken down by function and depreciation, interest and bad debts disclosed separately. The other income includes investment income. The extraordinary loss from the extinguishment of debt is shown at the bottom of the statement.

The statement of net assets begins with the excess of revenues over expenses ($5,052) from the statement of operations. The statement is divided between the changes in unrestricted net assets, temporarily restricted net assets and permanently restricted net assets.

Traditionally, hospital questions on the CPA exam have been in the areas of types of statements, formats of the statements, the calculation of net patient revenue, capitation agreements, other income and donation of supplies and services.
EXHIBIT E  

Sample Not-for-Profit Hospital 
STATEMENTS OF OPERATIONS 
Years Ended December 31, Year 6 and Year 5 
(in thousands)

<table>
<thead>
<tr>
<th></th>
<th>Year 6</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrestricted revenues, gains and other support:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net patient service revenue</td>
<td>$85,156</td>
<td>$78,942</td>
</tr>
<tr>
<td>Premium revenue</td>
<td>11,150</td>
<td>10,950</td>
</tr>
<tr>
<td>Other revenue</td>
<td>2,601</td>
<td>5,212</td>
</tr>
<tr>
<td>Net assets released from restrictions used for operations</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Total revenues, gains and other support</td>
<td>99,207</td>
<td>95,104</td>
</tr>
<tr>
<td>Expenses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td>88,521</td>
<td>80,585</td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>4,782</td>
<td>4,280</td>
</tr>
<tr>
<td>Interest</td>
<td>1,752</td>
<td>1,825</td>
</tr>
<tr>
<td>Provision for bad debts</td>
<td>1,000</td>
<td>1,300</td>
</tr>
<tr>
<td>Other</td>
<td>2,000</td>
<td>-1,300</td>
</tr>
<tr>
<td>Total expenses</td>
<td>98,055</td>
<td>89,290</td>
</tr>
<tr>
<td>Operating income</td>
<td>1,152</td>
<td>5,814</td>
</tr>
<tr>
<td>Other income:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment income</td>
<td>3,900</td>
<td>3,025</td>
</tr>
<tr>
<td>Excess of revenues over expenses</td>
<td>5,052</td>
<td>8,839</td>
</tr>
<tr>
<td>Change in net unrealized gains and losses on other than trading securities</td>
<td>300</td>
<td>375</td>
</tr>
<tr>
<td>Net assets released from restrictions used for purchase of property and equipment</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Contributions from Sample Hospital Foundation for property acquisitions</td>
<td>235</td>
<td>485</td>
</tr>
<tr>
<td>Transfers to parent</td>
<td>(640)</td>
<td>(3,000)</td>
</tr>
<tr>
<td>Increase in unrestricted net assets, before extraordinary item</td>
<td>5,147</td>
<td>6,699</td>
</tr>
<tr>
<td>Extraordinary loss from extinguishment of debt</td>
<td>(500)</td>
<td></td>
</tr>
<tr>
<td>Increase in unrestricted net assets</td>
<td>$4,647</td>
<td>$6,699</td>
</tr>
</tbody>
</table>

*See accompanying notes to financial statements.*

Source: AICPA Audit & Accounting Guide: 
Health Care Organizations, p. 140.
EXHIBIT F

Sample Not-for-Profit Hospital
STATEMENTS OF CHANGES IN NET ASSETS
Years Ended December 31, Year 6 and Year 5
(in thousands)

<table>
<thead>
<tr>
<th></th>
<th>Year 6</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unrestricted net assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excess of revenues over expenses</td>
<td>5,052</td>
<td>8,839</td>
</tr>
<tr>
<td>Net unrealized gains on investments, other than trading securities</td>
<td>300</td>
<td>375</td>
</tr>
<tr>
<td>Contributions from Sample Hospital Foundation for property acquisitions</td>
<td>235</td>
<td>485</td>
</tr>
<tr>
<td>Transfers to parent</td>
<td>(640)</td>
<td>(3,000)</td>
</tr>
<tr>
<td>Net assets released from restrictions used for purchase of property and equipment</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Increase in unrestricted net assets before extraordinary item</td>
<td>5,147</td>
<td>6,699</td>
</tr>
<tr>
<td>Extraordinary loss from extinguishment of debt</td>
<td>(500)</td>
<td></td>
</tr>
<tr>
<td>Increase in unrestricted net assets</td>
<td>4,647</td>
<td>6,699</td>
</tr>
<tr>
<td><strong>Temporarily restricted net assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributions for charity care</td>
<td>140</td>
<td>996</td>
</tr>
<tr>
<td>Net realized and unrealized gains on investments</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Net assets released from restrictions</td>
<td>(500)</td>
<td></td>
</tr>
<tr>
<td>Increase (decrease) in temporarily restricted net assets</td>
<td>(355)</td>
<td>1,004</td>
</tr>
<tr>
<td><strong>Permanently restricted net assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributions for endowment funds</td>
<td>50</td>
<td>411</td>
</tr>
<tr>
<td>Net realized and unrealized gains on investments</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Increase in permanently restricted net assets</td>
<td>55</td>
<td>413</td>
</tr>
<tr>
<td>Increase in net assets</td>
<td>4,347</td>
<td>8,116</td>
</tr>
<tr>
<td>Net assets, beginning of year</td>
<td>72,202</td>
<td>64,086</td>
</tr>
<tr>
<td>Net assets, end of year</td>
<td>76,549</td>
<td>72,202</td>
</tr>
</tbody>
</table>

See accompanying notes to financial statements.

Source: AICPA Audit & Accounting Guide:
Health Care Organizations, p. 142.
**Net Patient Service Revenue**

Example: The hospital rendered $1,000,000 in services to patients of which $800,000 is charged to third party payors. The collections department estimates that $850,000 will be collected. Of the $150,000 difference, $60,000 is the estimated contractual adjustments with insurance and Medicare providers, $50,000 is charity care, and $40,000 is the uncollected accounts.

The journal entries are:

1. Accounts receivable – patients 200,000  
   Accounts receivable – third party payors 800,000  
   Patient service revenue 1,000,000  
   To accrue patient service revenue.

2. Contractual adjustments 60,000  
   Allowance for contractual adjustments 60,000  
   To recognize amounts not expected to be collected from third party payors.

   Note: A contractual adjustment is a difference between what the hospital considers a fair price for a service vs. an agreed upon amount for the service with the insurance companies or Medicare. For example, the hospital may consider $3,000 a fair price for a service, but agree with Medicare to accept $2,800. The difference of $200 must be written off as contractual adjustment which becomes a reduction in patient service revenue.

3. Patient service revenue 50,000  
   Accounts receivable – patients 50,000  
   To reduce patient service revenue for charity care. Charity care is defined as patient service revenue in which there is no intention to collect for the services. Remember that charity care is not shown on the statement of operations but is disclosed in the footnotes.

4. Bad debt expense 40,000  
   Allowance on uncollected accts. 40,000  
   To accrue estimated uncollectible accounts.

The calculation of the net patient service revenue would be:

\[
\begin{align*}
\text{Gross patient service revenue} & \quad 1,000,000 \\
\text{Less contractual adjustments} & \quad (\ 60,000) \\
\text{Less charity care} & \quad (\ 50,000) \\
\text{Net patient service revenue} & \quad 890,000
\end{align*}
\]

**Capitation Agreements**

Capitation agreements are agreements with third parties based on the number of employees instead of services rendered. For example, ABC hospital signed an agreement with the XYZ Corporation to provide hospital services for $200 per month for each of XYZ’s 100 employees.

JE: Accounts receivable – XYZ Corporation 20,000  
Premium Revenue 20,000  
To accrue billings for the first month under the capitation agreement.
Other Revenues

Other revenues consist of revenues earned by the hospital that are not patient service revenues or premium revenues. Examples are the revenues from the hospital’s pharmacy, parking deck, flower and gift shop, educational programs, donated materials and services.

For example: A computer consultant donated her services to upgrade several hospital computers. The hospital would have paid $4,000 for these services if they had not been donated.

JE Expenses for professional services  4,000
Other revenue – donated services  4,000

Another example: Cafeteria sales to non-patients and gift shop receipts total $80,000.

JE Cash  80,000
Other revenue – cafeteria and gift shop  80,000
Chapter Sixteen
Not-for-Profit Accounting Questions

PUBLIC COLLEGES AND UNIVERSITIES

1. Public colleges use:
   a. An economic resources measurement focus.
   b. A current resources focus.
   c. A modified accrual accounting approach.
   d. A cash basis accounting approach.

2. According to SGAS 35, a public university is required to report:
   a. Fund-based financial statements.
   b. Institution-wide (government-wide) financial statements
   c. A balance sheet for the general fund.
   d. An actual vs. budget report for the special revenue fund.

3. A management’s discussion and analysis report for public colleges:
   a. Is optional.
   b. Should be reported as part of the footnotes.
   c. Is required and should precede the financial statements.
   d. Is required and should follow the presentation of each financial statement.

4. According to SGAS 35, cash flow statements for public universities:
   a. Are optional.
   b. Are required and must use the indirect method.
   c. Are optional, but if disclosed, must use the indirect method.
   d. Are required and must use the direct method.

5. Under SGAS 35, public colleges must capitalize infrastructure assets. Which of the following items is not an infrastructure asset?
   a. Road
   b. Bridge
   c. Sidewalk
   d. College Mascot (Carolina Ram)

6. Capital assets of universities
   a. Must be depreciated.
   b. Should not be depreciated.
   c. Must be depreciated by private colleges but not by public colleges.
   d. May not be depreciated by private colleges but must be depreciated by public colleges.

7. SGAS 35 requires that public universities that have university hospitals should report these as
   a. Separate funds
   b. Component units.
   c. Primary Institutions.
   d. A major fund.

8. Expenses of public colleges should be reported
   a. By object
   b. By function
   c. By either object or function
   d. By character.

9. The cost of construction of a university dormitory would be shown on a cash flow statement as
   a. Cash flows from operations.
   b. Cash flows from investing activities.
   c. Cash flows from financing activities.
   d. Cash flows from noncapital financing.

10. Cash flows from a public university bookstore would appear on the statement of cash flows as
    a. Cash flows from operations.
    b. Cash flows from investing activities.
    c. Cash flows from financing activities.
    d. Cash flows from noncapital financing.

11. Public universities must disclose separately in their cash flow statements
    a. Capital and noncapital related investing activities.
    b. Capital and noncapital related financing activities.
    c. Capital and noncapital related operational activities.
    d. Capital and noncapital related changes in net assets.
12. Interest paid on capital debt and leases must be reported on public colleges’ cash flow statements as
   a. Cash from operations
   b. Cash from investing activities.
   c. Cash from capital and related financing activities.
   d. Cash from noncapital financing activities.

13. The format for the cash flow statements for cash from operations (indirect method) begins with
   a. Operating income (or loss).
   b. Net income (or loss).
   c. Increase (decrease) in net assets.
   d. Operating income (or loss) plus (minus) non-operating revenues (expenses).

14. On the statement of net assets for a public university, the restricted net assets are divided between nonexpendable and expendable net assets. The non-expendable net assets allow for the expenditures of
   a. Principal only.
   b. Principal and earnings
   c. Earnings only
   d. Neither principal nor earnings.

15. SFAS 117 requires which of the following financial statements for private not-for-profit organizations?
   a. Statement of financial position, statement of activities and changes in net assets, and a statement of cash flows.
   c. Statement of cash flows, statement of revenues expenses and changes in net assets, and a statement of financial position.
   d. Balance sheet income statement for each fund.

16. Private not-for-profit organizations should report a statement of cash flows using the
   a. Direct method.
   b. Working capital method
   c. Indirect method
   d. Either the indirect or direct method.

17. On the statement of activities for a private college, expenses should be deducted from
   a. Temporarily unrestricted revenues.
   b. Unrestricted revenues.
   c. Unrestricted revenues and temporarily unrestricted revenues.
   d. Permanently restricted revenues.

18. On the statement of activities for a private university, expenses are reported by
   a. Character.
   b. Department.
   c. Object.
   d. Function

19. On the statement of activities and changes in net assets for private not-for-profit institutions, the changes in net assets should be presented for
   a. Unrestricted and permanently restricted net assets.
   b. Unrestricted, temporarily restricted and permanently restricted net assets.
   c. Unrestricted net assets only.
   d. Unrestricted and temporarily restricted net assets.

20. On the statement of activities for a private not-for-profit institution, the account, net assets released from restrictions, would be shown under revenues, gains, and other support as a
   a. Decrease in permanently restricted and an increase in temporarily restricted net assets.
   b. Decrease in restricted and an increase in temporarily restricted net assets.
   c. Decrease in temporarily restricted and increase in permanently restricted net assets.
   d. Decrease in temporarily restricted and increase in unrestricted net assets.

21. A statement of functional expenses is required for which of the following private not-for-profit institutions?
   a. Hospital.
   c. Fraternal Organization.
   d. College.
22. The statement of financial position for a private not-for-profit college should show separate dollar amounts for
   a. All accounts in its equity section.
   b. Unrestricted net assets only.
   c. Unrestricted net assets and temporarily restricted net assets.
   d. Unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets.

23. According to SFAS 117, the financial statements for a not-for-profit entity should focus on the
   a. Economic resources measurement approach.
   b. Current resources measurement approach.
   c. Basic information for the organization as a whole.
   d. Modified accrual approach.

24. The cash flows from operating activities section of the cash flow statement for a private not-for-profit college using the indirect method would begin with
   a. Net income from operations.
   b. Net change in working capital.
   c. Change in unrestricted net assets.
   d. Total changes in net assets.

25. The statement of cash flows for a private not-for-profit performing arts center should report cash flows according to which of the following classifications.
   a. Operating activities, investing activities and financing activities.
   b. Operating activities, non-capital activities and capital activities.
   c. Investing activities, capital activities and financing activities.
   d. Financing activities, non-capital activities and capital activities.

26. Guil College, a private not-for-profit college, received the following cash inflows:
   - $400,000 from students for tuition.
   - $200,000 from a donor who stipulated that the money be invested indefinitely and the earnings used for student scholarships.
   - $100,000 from a donor who stipulated that the money be spent according to the wishes of the Board of Trustees.
   Which amounts of these cash flows should be shown on the cash flow statement as cash from operating activities?
   a. $700,000.
   b. $400,000.
   c. $600,000.
   d. $500,000.

27. Smith College, a private not-for-profit college, received the following cash inflows:
   - Cash contributions of $200,000 to be permanently invested.
   - Cash dividends and interest of $10,000 for purchase of video equipment for the accounting department.
   How would these cash inflows be disclosed on the Smith College cash flow statement?
   a. $10,000 from operations and $200,000 from financing activities.
   b. $210,000 from operating activities.
   c. $210,000 from financing activities.
   d. $210,000 from investing activities.

28. FASB Statement No. 117, Financial Statements of Not-for-Profit Organizations, focuses on
   a. Basic information for the organization as a whole.
   b. Standardization of funds nomenclature.
   c. Inherent differences of not-for-profit organizations that impact reporting presentations.
   d. Distinctions between current fund and non-current fund presentations.

29. A large not-for-profit organization's statement of activities should report the net change for net assets that are

<table>
<thead>
<tr>
<th>Unrestricted</th>
<th>Permanently restricted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

28. FASB Statement No. 116, Accounting for Contributions Received and Contributions Made.

30. Lea Meditators, a not-for-profit religious organization, elected early adoption of FASB Statement No. 116, Accounting for Contributions Received and Contributions Made. A storm broke glass windows in Lea's building. A member of Lea's congregation, a professional glazier, replaced the windows at no charge. In Lea's statement of activities, the breakage and replacement of the windows should
   a. Not be reported.
   b. Be reported by note disclosure only.
   c. Be reported as an increase in both expenses and contributions.
   d. Be reported as an increase in both net assets and contributions.
31. On December 30, Year 4, Leigh Museum, a not-for-profit organization, received a $7,000,000 donation of Day Co. shares with donor stipulated requirements as follows:

- Shares valued at $5,000,000 are to be sold with the proceeds used to erect a public viewing building.
- Shares valued at $2,000,000 are to be retained with the dividends used to support current operations.

Leigh elected early adoption of FASB Statement No. 117, *Financial Statements of Not-for-Profit Organizations*. As a consequence of the receipt of the Day shares, how much should Leigh report as temporarily restricted net assets on its Year 4 statement of financial position?

a. $0  
b. $2,000,000  
c. $5,000,000  
d. $7,000,000

32. The Jones family lost its home in a fire. On December 25, Year 4, a philanthropist sent money to the Amer Benevolent Society to purchase furniture for the Jones family. During January Year 5, Amer purchased this furniture for the Jones family. Amer, a not-for-profit organization, elected early adoption of FASB Statement No. 116, *Accounting for Contributions Received and Contributions Made*. How should Amer report the receipt of the money in its Year 4 financial statements?

a. As an unrestricted contribution.  
b. As a temporarily restricted contribution.  
c. As a permanently restricted contribution.  
d. As a liability.

33. Glen Hope, a voluntary Health and Welfare organization, received a cash donation from George Swinney to purchase equipment for the organization’s kitchen. The donation was received in Year 5 but the equipment was not purchased until Year 6. For Year 5, Glen Hope should report the donation on the statement of activities as:

a. Non-operating revenue  
b. Unrestricted revenue.  
c. Endowment fund revenue.  
d. Temporarily restricted revenue.

34. CIBA, a non-profit performing arts organization, received a contribution of a term endowment and a regular endowment. These endowments should be reported on the statement of activities as:

<table>
<thead>
<tr>
<th>Term Endowments</th>
<th>Regular Endowments</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Permanently restricted</td>
<td>Permanently restricted</td>
</tr>
<tr>
<td>b. Temporarily restricted</td>
<td>Temporarily restricted</td>
</tr>
<tr>
<td>c. Temporarily restricted</td>
<td>Temporarily restricted</td>
</tr>
<tr>
<td>d. Unrestricted</td>
<td>Temporarily restricted</td>
</tr>
</tbody>
</table>

35. Vista, a voluntary health and welfare organization, received a donation of $100,000 to be spent in accordance with the wishes of the institution’s Board of Trustees. This donation should be reported on the statement of activities as:

a. Unrestricted revenue.  
b. Other income – gifts.  
c. Temporarily restricted revenue.  
d. Permanently restricted revenues.

36. Gray College, a private not-for-profit institution, received a contribution of $100,000 for faculty research. The donation was received in Year 5 and $80,000 was spent in Year 5. As a result of these transactions, Gray College should report on its Year 5 statement of activities as:

a. $20,000 increase in temporarily restricted net assets.  
b. $100,000 increase in temporarily restricted net assets.  
c. $80,000 increase in temporarily restricted net assets.  
d. $100,000 increase in unrestricted net assets.

37. Clay University, a not-for-profit university, earned $300,000 from bookstore revenue and spent $100,000 for faculty research in Year 5. The $100,000 for faculty research came from a $150,000 research grant received in the previous year. What is the effect of these events on unrestricted net assets in Year 5?

a. Increase $300,000.  
b. Increase $400,000.  
c. Increase $450,000.  
d. Increase $200,000.
38. Ellen College, a private not-for-profit institution, received a $100,000 grant for faculty research in Year 5. The grant money was not spent until Year 6. For Year 5, Ellen College should report the contribution as:
   a. Unrestricted revenue  
   b. Temporarily restricted revenue.  
   c. Other operating revenue.  
   d. Other non-operating revenue.

39. Which of the following transactions of a private voluntary health and welfare organization would increase temporarily restricted net assets in the statement of activities for the current year?
   I. Received a contribution of $20,000 from a donor in the current year who stipulated that the money not be spent until the following year.
   II. Spent $25,000 for fund raising during the current year from a donation from the previous year.
   a. I only  
   b. I & II  
   c. II only  
   d. Neither

40. In November, Year 6, Gilmore Heating and Air Conditioning Service repaired the air conditioning system for GenCare, a voluntary health and welfare organization and mailed an invoice for $3,000. On December 25, a note was received by GenCare indicating that Gilmore was canceling the invoice and that repairs were being donated. For the year ended, December 31, Year 6, GenCare should report these contributed services as:
   a. A footnote.  
   b. No disclosure is required but a thank-you note was mailed to Gilmore.  
   c. An increase in unrestricted revenues and an increase in expenses on the statement of activities.  
   d. An increase in temporarily restricted net assets in the statement of activities.

41. The Granger Community Foundation, a private not-for-profit institution, received the following contributed services:
   I. Ernst & Dalton, a legal firm contributed advice to the foundation in relation to the handling of the organization’s endowment funds.
   II. Senior citizens participated in a telethon to raise money for the new computer equipment for the organization.
   Which of these services would be recorded on the statement of activities?

42. On December 31, Year 6, the Board of Trustees of a private, not-for-profit college designated $5,000,000 of unrestricted net assets for the construction of an addition to the music building. What effect does this designation have on the college’s unrestricted and temporarily restricted net assets shown on the statement of financial position on December 31, Year 6?
<table>
<thead>
<tr>
<th>Unrestricted Net Assets</th>
<th>Temporarily restricted Net Assets</th>
</tr>
</thead>
</table>
   a. Decrease             | Increase                      |
   b. Decrease             | No effect                     |
   c. No effect            | Increase                      |
   d. No effect            | No effect                     |

43. The following contributions were received by a private voluntary health and welfare organization. Which of these would not be recorded as an increase in unrestricted revenue?
   a. A carpenter donated labor and materials for the construction of a deck.
   b. A painter donated paint and labor to paint all the meeting rooms.
   c. A retired college professor donated reading services to senior citizens. The organization would not have paid for these services if they had not been donated.
   d. A CPA firm donated its services to audit the financial statements for the past year.

**Miscellaneous: Not-For-Profit**

44. A local voluntary health and welfare organization had the following expenditures:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative salaries</td>
<td>$20,000</td>
</tr>
<tr>
<td>Work to help elderly citizens</td>
<td>$60,000</td>
</tr>
<tr>
<td>Fund-raising costs</td>
<td>$5,000</td>
</tr>
<tr>
<td>Child care services provided for indigent families</td>
<td>$40,000</td>
</tr>
</tbody>
</table>

How should these items be reported by the organization?

<table>
<thead>
<tr>
<th>Program Service Expense</th>
<th>Supporting Service Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $120,000</td>
<td>$ 5,000</td>
</tr>
<tr>
<td>b. $100,000</td>
<td>$25,000</td>
</tr>
<tr>
<td>c. $105,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>d. $ 80,000</td>
<td>$45,000</td>
</tr>
</tbody>
</table>
45. Which one of the following is not a required financial statement for a private voluntary health and welfare organization?
   a. Statement of Financial Position
   b. Statement of Activities and Changes in Net Assets
   c. Statement of Fund Balance
   d. Statement of Cash Flows
   e. Statement of Functional Expense

46. Gerlack College, a private, not-for-profit institution, received a donation of $2,000,000 as a challenge grant. If the college raises an additional $2,000,000 within the next two years, it may keep the donation. If it fails, the $2,000,000 must be returned to the donor. How would the college record the receipt of the grant?
   a. Unrestricted revenue.
   b. Temporarily restricted revenue.
   c. Note to the financial statement.
   d. Refundable advance.

47. Which one of the following is a voluntary health and welfare organization?
   a. Charity raising money for underprivileged children.
   b. Nursing Home
   c. Clinic
   d. Hospital

48. A private not-for-profit performing arts center receives the following three donations:
   - A gift of $90,000 which is unrestricted.
   - A gift of $125,000 restricted for payment of salaries.
   - A gift of $200,000 that is restricted forever but the income from the gift may be used for current expenditures.

Which of the following is not true?
   a. Temporarily restricted net assets increased by $125,000.
   b. Permanently restricted net assets increased by $325,000.
   c. When the money is spent for salaries, unrestricted net assets increase and decrease by the same amount.
   d. When the money is spent for salaries, temporarily restricted net assets decrease.

49. A voluntary health and welfare organization had the following asset inflows:
   Cash gifts $40,000
   Membership dues 8,000
   Dividend income 5,000
   Interest income 3,000
   Donated supplies 2,000

How should these items be reported?

<table>
<thead>
<tr>
<th>Revenues</th>
<th>Public Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $16,000</td>
<td>$42,000</td>
</tr>
<tr>
<td>b. $8,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>c. $56,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>d. $10,000</td>
<td>$48,000</td>
</tr>
</tbody>
</table>

50. A private, not-for-profit college holds debt securities in current assets and in non-current assets. How would these items be reported on the Statement of Financial Position?

<table>
<thead>
<tr>
<th>Debt Securities in Current Assets</th>
<th>Debt Securities in Non-current Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Fair value</td>
<td>Carrying value</td>
</tr>
<tr>
<td>b. Carrying value</td>
<td>Fair value</td>
</tr>
<tr>
<td>c. Fair value</td>
<td>Fair value</td>
</tr>
<tr>
<td>d. Carrying value</td>
<td>Carrying value</td>
</tr>
</tbody>
</table>

51. Vista, a private, not-for-profit health and welfare organization, purchased stock in XYZ Corp. using unrestricted net assets and paid $50,000. The investment represents less than 2% interest in XYZ. At the end of the year, Vista received a cash dividend of $3,000 and the value of the XYZ stock at year end was $65,000. On its statement of activities from the current year, what amount would Vista report from XYZ?
   a. $18,000 increase in unrestricted net assets.
   b. $15,000 increase in temporarily restricted net assets.
   c. $3,000 in unrestricted net assets.
   d. $15,000 increase in unrestricted net assets.

52. Electra, a not-for-profit performing arts organization, held some donor restricted endowment funds which are invested in stocks that are listed on the NY Stock Exchange, so the fair values are readily determinable. Most of the investments represent amounts between 2% and 5% of the outstanding common stock of the investee corporations. However, Electra does own stock in one company that gives it the ability to exercise significant influence over the operating and financing policies of the investee company. How should these two types of investments be reported on Electra’s Statement of Financial Position at year end?
<table>
<thead>
<tr>
<th>Equity Securities</th>
<th>Equity Securities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%-5% ownership</td>
<td>significant influence</td>
</tr>
<tr>
<td>a. Fair value</td>
<td>Fair value</td>
</tr>
<tr>
<td>b. Equity method</td>
<td>Equity method</td>
</tr>
<tr>
<td>c. Fair value</td>
<td>Equity method</td>
</tr>
<tr>
<td>d. Fair value</td>
<td>Carrying value</td>
</tr>
</tbody>
</table>

**HEALTH CARE ORGANIZATIONS**

53. A hospital has the following account balances:
- Amount charged to patients: $500,000
- Revenue from newsstand: $15,000
- Undesignated gifts: $40,000
- Contractual adjustments: $70,000
- Interest income: $12,000
- Salaries expense – nurses: $120,000
- Bad debts: $8,000

What is the hospital’s net patient service revenue?
- a. $422,000
- b. $430,000
- c. $500,000
- d. $540,000

54. According to the AICPA audit and accounting guide, which one of the following is not a required financial statement for a health care organization?
- a. Statement of Operations
- b. Balance Sheet
- c. Statement of Changes in Equity
- d. Statement of Functional Expense

55. Which one of the following is not one of the financial statements required for a health care organization?
- a. Statement of Operations
- b. Statement of Cash Flows
- c. Balance Sheet
- d. Income Statement

56. Which account would be credited in recording a gift of medicine to a nursing home from an outside party?
- a. Non-operating Gain – Donations
- b. Contractual Adjustments
- c. Patient Service Revenues
- d. Other Revenues – Donations

57. A hospital has the following account balances:
- Revenue from newsstand: $50,000
- Amounts charged to patients: $800,000
- Interest income: $30,000
- Salary expense – nurses: $100,000
- Bad debts: $10,000
- Undesignated gifts: $80,000
- Contractual adjustments: $110,000

What is the hospital’s net patient service revenue?
- a. $880,000
- b. $800,000
- c. $690,000
- d. $680,000

58. In accounting for hospitals, what are third party payors?
- a. Drug companies who supply free drugs for charity patients.
- b. Doctors who reduce fees for poor patients.
- c. Insurance companies, Medicare and other groups that pay a significant portion of medical fees for patients.
- d. A computer company who repairs the hospital’s computers without charge.

59. What is a contractual adjustment?
- a. An adjusting entry made at year-end to accrue unpaid patient service revenue.
- b. A reduction of patient service revenue for charity care.
- c. An allocation of the cost of patient care to the departments that supply the patient care.
- d. A reduction in patient service revenue because of agreements with third party payors that allow them to pay a health care entity based on the agreed upon determination of reasonable cost.

60. Fike Hospital, a private, not-for-profit institution, receives an unrestricted gift of common stock with a fair value of $100,000. The donor had paid $40,000 for the stock five years earlier. The gift should be recorded as an
- a. Increase in temporarily restricted net assets of $100,000.
- b. Increase in unrestricted net assets of $100,000.
- c. Increase in temporarily restricted net assets of $40,000.
- d. Increase in unrestricted net assets of $40,000.
61. Which of the following types of health care organizations follow FASB statements?

<table>
<thead>
<tr>
<th>Investor-Owned Health Care Enterprises</th>
<th>Private Not-for-Profit Organizations</th>
<th>Governmental Health Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

62. Which of the following types of health care organizations recognize depreciation expense?

<table>
<thead>
<tr>
<th>Investor-Owned Health Care Enterprises</th>
<th>Private Not-for-Profit Organizations</th>
<th>Governmental Health Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

63. In accruing patient charges for the current month, which one of the following accounts should a hospital credit?

a. Accounts Payable
b. Patient Service Revenues
c. Unearned Revenue
d. Deferred Revenue

64. According to the AICPA Audit Guide, hospitals should prepare which of the following financial statements?

<table>
<thead>
<tr>
<th>Statement of Changes</th>
<th>Statement of Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Net Assets</td>
<td></td>
</tr>
<tr>
<td>a. Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. No</td>
<td>Yes</td>
</tr>
<tr>
<td>d. No</td>
<td>No</td>
</tr>
</tbody>
</table>

65. The Weyman Hospital, a private, not-for-profit institution, reported the following information:

Gross patient service revenue $1,000,000
Allowance for discounts to hospital employees 20,000
Bad debt expense 40,000
Contractual adjustments 100,000

What amount should the hospital report as net patient service revenue?

a. $840,000
b. $900,000
c. $880,000
d. $980,000

66. A private not-for-profit hospital provided $150,000 in charity care for the current year. The hospital should report this charity care as

a. Net patient service revenue of $150,000 and patient care expense of $150,000.
b. Net patient service revenue of $150,000 on the statement of operations.
c. Only in the notes to the financial statements.
d. As an unpaid accounts receivable on the balance sheet.

67. The Johnson Hospital, a private not-for-profit hospital, received the following revenues in the current year:

Proceeds from sales of the Hospital’s flower shop $60,000
Dividends and interest revenue not restricted $20,000
Cash contributions for the renovation of the children’s ward in the Hospital $200,000

Which of these amounts should be reported as other revenues and gains (other revenue) on the Statement of Operations?

a. $280,000
b. $60,000
c. $80,000
d. $260,000

68. The Whitlow Hospital, a private not-for-profit hospital, uses as its performance indicator revenues and gains over expenses and losses. Which of the following items would be included in the calculation of this indicator?

- Unrealized gains on other than trading securities. The securities are included in the unrestricted net assets.
- Contributions received from a donor in the current year that cannot be spent until the following year.

a. Neither
b. Both
c. Unrealized gains only
d. Contribution only
69. The Audit Guide requires that private not-for-profit hospitals report a performance indicator on its statement of operations. Which of the following items would be included in the calculation of the performance indicator?

- Proceeds from cafeteria sales to non-patients.
- Net assets released from restrictions used for operating expenses.

a. Both
b. Neither
c. Proceeds from cafeteria sales
d. Net assets released from restrictions used for operating expenses.

70. On December 31, Year 3, Dahlia, a non-governmental not-for-profit organization, purchased a vehicle with $15,000 unrestricted cash and received a donated second vehicle having a fair value of $12,000. Dahlia expects each vehicle to provide it with equal service value over each of the next five years and then to have no residual value. Dahlia has an accounting policy implying a time restriction on gifts of long-lived assets. In Dahlia’s Year 4 statement of activities, what depreciation expense should be included under changes in unrestricted net assets?

a. $0
b. $2,400
c. $3,000
d. $5,400

71. Home Care, Inc., a nongovernmental voluntary health and welfare organization, received two contributions in Year 3. One contribution of $250,000 was restricted for use as general support in Year 4. The other contribution of $200,000 carried no donor restrictions. What amount should Home Care report as temporarily restricted contributions in its Year 3 statement of activities?

a. $450,000
b. $250,000
c. $200,000
d. $0

Recently Disclosed Questions

72. Arpco, Inc., a for-profit provider of healthcare services, recently purchased two smaller companies and is researching accounting issues arising from the two business combinations. Which of the following accounting pronouncements are the most authoritative?

a. AICPA Statements of Position.
b. AICPA Industry and Audit Guides.
d. FASB Statements of Financial Accounting Standards.

73. During the year, Public College received the following:

- An unrestricted $50,000 pledge to be paid the following year.
- A $25,000 cash gift restricted for scholarships.
- A notice from a recent graduate that the college is named as a beneficiary of $10,000 in that graduate’s will.

What amount of contribution revenue should Public College report in its statement of activities?

a. $25,000.
b. $35,000.
c. $75,000.
d. $85,000.

74. A voluntary health and welfare organization received a $700,000 permanent endowment during the year. The donor stipulated that the income and investment appreciation be used to maintain its senior center. The endowment fund reported a net investment appreciation of $80,000 and investment income of $50,000. The organization spent $60,000 to maintain its senior center during the year. What amount of change in temporarily restricted net assets should the organization report?

a. $50,000
b. $70,000
c. $130,000
d. $770,000
75. During current year, a voluntary health and welfare organization receives $300,000 in unrestricted pledges. Of this amount, $100,000 has been designated by donors for use next year to support operations. If 15% of the unrestricted pledges are expected to be uncollectible, what amount of unrestricted support should the organization recognize in its current-year financial statements?
   a. $300,000
   b. $270,000
   c. $200,000
   d. $170,000

76. Which of the following assets of a nongovernmental not-for-profit charitable organization must be depreciated?
   a. A freezer costing $150,000 for storing food for the soup kitchen.
   b. Building costs of $500,000 for construction in progress for senior citizen home.
   c. Land valued at $1 million being used as the site of the new senior citizen home.
   d. A bulk purchase of $20,000 of linens for its nursing home.

77. A nongovernmental not-for-profit organization borrowed $5,000, which it used to purchase a truck. In which section of the organization’s statement of cash flows should the transaction be reported?
   a. In cash inflow and cash outflow from investing activities.
   b. In cash inflow and cash outflow from financing activities.
   c. In cash inflow from financing activities and cash outflow from investing activities.
   d. In cash inflow from operating activities and cash outflow from investing activities.

78. Janna Association, a nongovernmental not-for-profit organization, received a cash gift with the stipulation that the principal be held for at least 20 years. How should the cash gift be recorded?
   a. A temporarily restricted asset.
   b. A permanently restricted asset.
   c. An unrestricted asset.
   d. A temporary liability.

79. Which of the following not-for-profit entities is required to prepare a statement of functional expense?
   a. An art museum.
   b. A shelter for the homeless.
   c. A private foundation.
   d. A public golf course.

80. Gridiron University is a private university. A successful alumnus has recently donated $1,000,000 to Gridiron for the purpose of funding a "center for the study of sports ethics." This donation is conditional upon the university raising matching funds within the next 12 months. The university administrators estimate that they have 50% chance of raising the additional money. How should this donation be accounted for?
   a. As a temporarily restricted support.
   b. As unrestricted support.
   c. As a refundable advance.
   d. As a memorandum entry reported in the footnotes.

81. During the current fiscal year, Foxx, a nongovernmental not-for-profit organization, received unrestricted pledges of $300,000. Of the pledged amount, $200,000 was designated by donors for use during the current year, and $100,000 was designated for next year. Five percent of the pledges are expected to be uncollectible. What amount should Foxx report as restricted support (contributions) in the statement of activities for the current year?
   a. $200,000
   b. $190,000
   c. $100,000
   d. $95,000

82. How should a nongovernmental not-for-profit organization report depreciation expense in its statement of activities?
   a. It should not be included.
   b. It should be included as a decrease in unrestricted net assets.
   c. It should be included as an increase in temporarily restricted net assets.
   d. It should be reclassified from unrestricted net assets to temporarily restricted net assets, depending on donor-imposed restrictions on the assets.

83. Arkin Corp. is a nongovernmental not-for-profit organization involved in research. Arkin's statement of functional expenses should classify which of the following as support services?
   a. Salaries of staff researchers involved in research.
   b. Salaries of fundraisers for funds used in research.
   c. Costs of equipment involved in research.
   d. Costs of laboratory supplies used in research.
Chapter Sixteen
Not-for Profit Accounting
Other Objective Answer Format Questions

Private Sector Not-for-Profit Question

NUMBER 1

Number 1 consists of 6 items. Select the best answer for each item.

Alpha Hospital, a large not-for-profit organization, has adopted an accounting policy that does not imply a time restriction on gifts of long-lived assets.

Required:
For Items 1 through 6, indicate the manner in which the transaction affects Alpha's financial statements.

(A) Increase in unrestricted revenues, gains, and other support.
(B) Decrease in an expense.
(C) Increase in temporarily restricted net assets.
(D) Increase in permanently restricted net assets.
(E) No required reportable event.

1. Alpha's board designates $1,000,000 to purchase investments whose income will be used for capital improvements.

2. Income from investments in item 1 above, which was not previously accrued, is received.

3. A benefactor provided funds for building expansion.

4. The funds in item 3 above are used to purchase a building in the fiscal period following the period the funds were received.

5. An accounting firm prepared Alpha's annual financial statements without charge to Alpha.

6. Alpha received investments subject to the donor's requirement that investment income be used to pay for outpatient services.

NUMBER 2

Community Service, Inc.
Private Voluntary Health & Welfare Organization

a. Community Service, Inc. is a nongovernmental not-for-profit voluntary health and welfare calendar-year organization that began operations on January 1, Year 5. It performs voluntary services and derives its revenue primarily from voluntary contributions from the general public. Community implies a time restriction on all promises to contribute cash in future periods. However, no such policy exists with respect to gifts of long-lived assets.
Selected transactions that occurred during Community’s Year 6 calendar year:

1. Unrestricted written promises to contribute cash—Year 5 and Year 6
   —Year 5 promises (collected in Year 6) $22,000
   —Year 6 promises (collected in Year 6) 95,000
   —Year 6 promises (uncollected) 28,000

2. Written promises to contribute cash restricted to use for community college scholarships—Year 5 and Year 6
   —Year 5 promises (collected and expended in Year 6) $10,000
   —Year 6 promises (collected and expended in Year 6) 20,000
   —Year 6 promises (uncollected) 12,000

3. Written promise to contribute $25,000 if matching funds are raised for the capital campaign during Year 6
   —Cash received in Year 6 from contributor as a good faith advance $25,000
   —Matching funds received in Year 6 0

4. Cash received in Year 5 with donor’s only stipulation that a bus be purchased
   —Expenditure of full amount of donation 7/1/Year 6 $37,000

**Required:**

Items 1 through 4 represent the Year 6 amounts that Community reported for selected financial statement elements in its December 31, Year 6 statement of financial position and Year 6 statement of activities. For each item, indicate whether the amount was overstated, understated, or correctly stated. An answer may be selected once, more than once, or not at all.

**List**

O. Overstated.
U. Understated.
C. Correctly stated.

1. Community reported $28,000 as contributions receivable.
2. Community reported $37,000 as net assets released from restrictions (satisfaction of use restrictions).
3. Community reported $22,000 as net assets released from restrictions (due to the lapse of time restrictions).
4. Community reported $97,000 as contributions—temporarily restricted.

b. Items 5 though 11 are based on the following:

   Community Service, Inc. is a nongovernmental not-for-profit voluntary health and welfare calendar-year organization that began operations on January 1, Year 5. It performs voluntary services and derives its revenue primarily from voluntary contributions from the general public. Community implies a time restriction on all promises to contribute cash in future periods. However, no such policy exists with respect to gifts of long-lived assets.

Selected transactions that occurred during Community’s Year 6 calendar year:

1. Debt security endowment received in Year 6; income to be used for community services
   --Face value $90,000
   --Fair value at time of receipt 88,000
   --Fair value at 12/31/Year 6 87,000
   --Interest earned in Year 6 9,000

2. 10 concerned citizens volunteered to serve meals to the homeless (400 hrs. free; fair market value of services $5 per hr.) 2,000
3. Short-term investment in equity securities in Year 6  
   --Cost 10,000  
   --Fair value 12/31/Year 6 12,000  
   --Dividend income 1,000  

4. Music festival to raise funds for a local hospital  
   --Admission fees 5,000  
   --Sales of food and drinks 14,000  
   --Expenses 4,000  

5. Reading materials donated to Community and distributed to the children in Year 6  
   --Fair Market Value 8,000  

6. Federal youth training fee for service grant  
   --Cash received during Year 6 30,000  
   --Instructor salaries paid 26,000  

7. Other cash operating expenses  
   --Business manager salary 60,000  
   --General bookkeeper salary 40,000  
   --Director of community activities salary 50,000  
   --Space rental (75% for community activities, 25% for office activities) 20,000  
   --Printing and mailing costs for pledge cards 2,000  

8. Interest payment on short-term loan in Year 6 1,000  

9. Principal payment on short-term bank loan in Year 6 20,000  

**Required:**  
For items 5 through 11, determine the amounts for the following financial statement elements in the Year 6 statement of activities. Select your answer from the following list of amounts. An amount may be selected once, more than once, or not at all.  

<table>
<thead>
<tr>
<th>Amounts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. $0</td>
<td>F. $9,000</td>
</tr>
<tr>
<td>B. $2,000</td>
<td>G. $14,000</td>
</tr>
<tr>
<td>C. $3,000</td>
<td>H. $16,000</td>
</tr>
<tr>
<td>D. $5,000</td>
<td>I. $26,000</td>
</tr>
<tr>
<td>E. $8,000</td>
<td>J. $50,000</td>
</tr>
<tr>
<td></td>
<td>K. $87,000</td>
</tr>
<tr>
<td></td>
<td>L. $88,000</td>
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<tr>
<td></td>
<td>M. $90,000</td>
</tr>
<tr>
<td></td>
<td>N. $94,000</td>
</tr>
<tr>
<td></td>
<td>O. $99,000</td>
</tr>
</tbody>
</table>

5. Contributions—permanently restricted.  
6. Revenues—fees.  
7. Investment income—debt securities.  
8. Program expenses.  
9. General fund-raising expenses (excludes special events)  
10. Income on long-term investments—unrestricted.  
11. Contributed voluntary services.  

**c.** Items 12 through 19 are based on the fact pattern and financial information found in both Part a. and Part b.
Required:
Items 12 through 19 represent Community’s transactions reportable in the statement of cash flows. For each of the items listed, select the classification that best describes the item. A classification may be selected once, more than once, or not at all.

Classifications

O. Cash flows from operating activities.
I. Cash flows from investing activities.
F. Cash flows from financing activities.

12. Unrestricted Year 5 promises collected.
13. Cash received from a contributor as a good faith advance on a promise to contribute matching funds.
15. Principal payment on short-term bank loan.
16. Purchase of equity securities.
17. Dividend income earned on equity securities.
18. Interest payment on short-term bank loan.
19. Interest earned on endowment.
Chapter Sixteen
Solutions to Not-for-Profit Accounting Questions

1. (a) SGAS 35 requires an economic resources measurement focus and accrual accounting.

2. (b) Answers A, C, & D are incorrect because they are fund-based reports and fund-based reports are not required by SGAS 35.

3. (c) The management’s discussion and analysis is required and should precede the financial statements.

4. (d) Cash flow statements must be presented and the direct method is required.

5. (d) Roads, bridges and sidewalks are all examples of infrastructure assets.

6. (a) Capital assets must be depreciated by both private and public colleges.

7. (b) Answers A & D are incorrect because public universities are not required to report fund-based statements. Answer C is incorrect because the university, not the hospital, is the primary institution.

8. (c) Expenses may be reported using either object or function according to SGAS 35.

9. (b) Construction cost would be an investing activity.

10. (a) Cash flows from a public university’s bookstore would be cash from operations.

11. (b) Public universities must disclose separately in their cash flows statements capital and noncapital related financing activities.

12. (c) This is a difference between accounting for public not-for-profits and non-public not-for-profit. Public not-for-profits report interest paid on capital debt and leases as cash from capital and related financing activities. Non-public not-for-profits report these items (like a corporation) as a part of cash from operations.

13. (a) Exhibit D

14. (c) Nonexpendable net assets allow for the expenditure of earnings but not principal.

15. (a) The financial statements for private not-for-profit organizations include a statement of financial position, a statement of activities and changes in net assets, and a statement of cash flows. Answers (b) and (d) are wrong because of the use of the term “balance sheet”. Answer (c) is incorrect because SFAS 117 requires a statement of activities not a statement of revenues and expenses.

16. (d) SFAS 117 states that either the direct or indirect method may be used.

17. (b) Expenses are deducted from unrestricted revenues.

18. (d) Expenses must be reported by function.

19. (b) SFAS 117 requires a disclosure of unrestricted, temporarily restricted and permanently restricted net assets.

20. (d) Net assets released from restrictions would cause a decrease in temporarily restricted and an increase in unrestricted net assets.
21. (b) SFAS 117 requires a statement of functional expenses for voluntary health and welfare organizations. The statement is optional for all other not-for-profit private institutions.

22. (d) SFAS 117 requires separate dollar amounts for unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets.

23. (c) SFAS 117 required that financial statements focus on basic information for the organization as a whole.

24. (d) The cash flow statement would begin with total changes in net assets.

25. (a) The Statement of Cash Flows should be classified as operating activities, investing activities and financing activities.

26. (d) The $200,000 donation would be an investing activity and the other two amounts would be operating activities.

27. (c) The $200,000 cash contribution is a financing activity and since the cash dividends and interest are restricted for purchase of video equipment and not available for operations, they are also considered financing activities.

28. (a) FASB Statement No. 117 focuses on the entity concept and views not-for-profits as a single unit rather than prior concepts that viewed the entity as being made up of component parts (Fund accounting concepts).

29. (a) The statement of activities reports the changes in all classes of net assets (unrestricted, temporarily restricted and restricted.)

30. (c) SFAS #116 states that contributed services should be recognized if the services: 1) require specialized skills and 2) they would typically need to be purchased if not provided by donation. When recognizing donated services that entity would record the fair market value of the service as a contribution and an expense.

31. (c) SFAS #117 states that there are three classifications of net assets—unrestricted, temporarily restricted, and permanently restricted. Temporarily restricted net assets are subject to a time or task requirement to use funds in a particular way. Leigh Museum received $5,000,000 of temporarily restricted assets (building construction) and $2,000,000 of permanently restricted funds (amount never to be spent).

32. (b) The contribution received was for a specific purpose. It could only be spent for furniture for the Jones family. Therefore, the contribution is restricted for that purpose and no other.

33. (d) Since the donation was not spent in the current year, it should be considered temporarily restricted revenue.

34. (b) Since the term endowment allows a portion of the principal to be spent each period, it is temporarily restricted. The regular endowment does not allow any of the principal to be spent; therefore, it is permanently restricted.

35. (a) Since the donation is not restricted, it should be shown as unrestricted revenue.

36. (a) The initial receipt of $100,000 would increase temporarily restricted net assets by $100,000 but the $80,000 that was spent is a classification reduction in temporarily restricted net assets for a net increase of $20,000.

37. (a) The $300,000 in bookstore revenue increased unrestricted net assets by $300,000. The reclassification of the $100,000 for research from temporarily restricted to unrestricted increased unrestricted net assets by $100,000 but this was offset by the $100,000 expenditure which decreased unrestricted net assets. The net effect is a $300,000 increase in unrestricted net assets.

38. (b) Since the contribution was not spent in the current year, it should be classified as temporarily restricted revenue.
39. (a) The $20,000 contribution is time restricted and cannot be spent in the current year, therefore, should increase temporarily restricted net assets. The $25,000 for fund raising would decrease temporarily restricted net assets because it would be reclassified and transferred to unrestricted net assets for the current year.

40. (c) Since this donation replaces skilled services that would ordinarily have been paid for, it is recorded as expenses and unrestricted revenues.

41. (b) Contributions of skilled advice that the organization would normally pay for are recorded as expenses and unrestricted revenues. The senior citizens' contribution does not require special skills and would not be recorded by the organization.

42. (d) Since the restriction is an internal not an external restriction, the classification of unrestricted net assets does not change.

43. (c) A, B, and D are all contributions of skilled labor that the organization would ordinarily have paid for. The reading services do not require any special skills and would not be recorded.

44. (b) Child care and work with elderly are program services that total $100,000. Administrative salaries and fund raising costs are supporting services that total $25,000.

45. (c) Since fund-accounting is no longer required, a Statement of Fund Balances is not reported.

46. (d) SFAS 116 states that a conditional grant should be recorded as a refundable advance.

47. (a) B, C, and D are health care organizations.

48. (b) Permanently restricted net assets would increase $200,000 for the gift that is restricted forever. When the salaries are going to be paid, the temporarily restricted net assets are reclassified (decreased) to unrestricted net assets (increased). When the salaries are actually paid out of unrestricted net assets, then unrestricted net assets decrease.

49. (a) Revenues are membership dues, dividend income, and interest income for a total of $16,000. Public support consists of cash gifts and donated supplies for a total of $42,000.

50. (c) SFAS 124 requires that the assets be reported at fair value.

51. (a) According to SFAS 124, the unrealized gain on XYZ of $15,000 and the dividend revenue ($3,000) from the unrestricted investments would be included in the Statement of Activities.

52. (c) The 2% - 5% ownership is covered by SFAS 124 and should be reported at fair value. SFAS 124 does not cover investments with significant influence but APB #18 would require the use of equity method.

53. (b) Amount charged to patients minus contractual adjustments equals $430,000.

54. (d) Only voluntary health and welfare organizations are required to issue a Statement of Functional Expenses.

55. (d) Health care organizations are required to issue a statement of operations, not an income statement.

56. (d) A gift of medicine would be credited to other revenues - donations.

57. (c) Net patient service revenue is the amounts charged to patients less the contractual adjustments for a total of $690,000.

58. (c) A, B, and D are examples of donated services or supplies.
59. (d)

60. (b) Donations of unrestricted net assets should be recorded at fair value in the unrestricted net assets.

61. (a) Governmental health care organizations follow GASB statements.

62. (d) All health care organizations are required to recognize depreciation expense.

63. (b) Patient charges are accrued as patient service revenues.

64. (b) The Audit Guide requires a balance sheet, a statement of operations, a statement of changes in net assets and a statement of cash flows.

65. (c) Gross patient service revenue less the allowance for discounts to hospital employees and less contractual adjustments equals net patient service revenue of $880,000.

66. (c) The Audit Guide requires that the amount of charity care and the policy for providing charity care be disclosed in the footnotes.

67. (c) The revenue from the flower shop and the unrestricted dividends and interest should be reported as other revenues and gains for a total of $80,000.

68. (a) Answers (b) and (d) are incorrect because the contributions should be included in temporarily restricted net assets. The unrealized gains are not a part of the performance indicator according to the Audit Guide, but should be reported on the statement of operations after the performance indicator.

69. (a) Both the sales from the cafeteria and the net assets released from the restrictions used for operating purposes would be included in the performance indicator.

70. (d) A nongovernmental not for profit organization would calculate the depreciation just like a corporation. Total cost of $27,000 divided by 5 years = $5,400.

71. (b) Since the $250,000 cannot be spent until Year 4, a time restriction applies and the contribution would be classified as temporarily restricted in the Year 3 financial statements. The $200,000 contribution is not restricted and would be reported as unrestricted revenue.

72. (d) In the GAAP Hierarchy (SAS #69, page 7-11) the FASB Statements of Financial Accounting Standards are the highest level of GAAP.

73. (c) Since Public College uses the accrual method, the unrestricted $50,000 pledge and the $25,000 gift for a total of $75,000 are included as contribution revenue. Because of the uncertainty associated with being named as a beneficiary of a will, it is not considered as contribution revenue. For example, the graduate could change the beneficiary of the will sometime in the future.

74. (b) The temporarily restricted net assets should report increases of $80,000 appreciation plus investment income of $50,000 for a total of $130,000 less the $60,000 spent in the current year for a net increase of $70,000.

75. (d) Since the voluntary health and welfare organizations use the accrual method, the pledges less the uncollectible portion should be recorded as support. Of the $300,000 in pledges received, $100,000 include a time restriction and should be listed in temporarily restricted support. The other $200,000 less the uncollectible portion ($200,000 x 15% = $30,000) or $170,000 should be reported as unrestricted support.
76. (a) The freezer is a long-term asset that will benefit the organization for more than one accounting period and should be depreciated. B is incorrect because the building is not complete. C is wrong because land is not an exhaustible asset and is not depreciated. D is incorrect because the linen would be treated like supplies inventory and not depreciated.

77. (c) When the money is borrowed it is considered a financing activity and when the truck is purchased it is an investing activity. Remember the general rule: Changes in assets that are not operational are investing activities and changes in liabilities or equity that are not operations are financing activities.

78. (a) Although 20 years may seem like a long time, it is not forever, so the gift would be recorded as a temporarily restrictive asset.

79. (b) Only not-for-profit entities that qualify as voluntary health and welfare entities are required to prepare a statement of functional expense. The shelter for the homeless would qualify because the majority of it support would come from donations which is the criterion used in determining whether the entity is a voluntary health and welfare organization.

80. (c) Since the university has an obligation to return the funds if the matching funds are not raised, the contribution is recorded as a refundable advance which is a liability.

81. (d) In a nongovernmental not-for-profit organization the accrual method is used. Therefore, the amount recognized as restricted support would be the total restricted pledge of $100,000 less the estimated uncollectible pledges of $5,000 for a net of $95,000. The estimated uncollectible pledges would be 5% times $100,000 = $5,000.

82. (b) Normal income statement items such as depreciation expense would be deducted from unrestricted net assets in a non-governmental not-for-profit organization.

83. (b) In a nongovernmental not-for-profit organization involved in research, the salaries of staff researchers involved in research, the depreciation on the equipment involved in research and cost of laboratory supplies used in research are all considered program expenses. The salaries of fundraisers for funds used in research are considered support services.
Chapter Sixteen
Not-for Profit Accounting
Other Objective Answer Format Solutions

NUMBER 1

1. (E) No required reportable event.
2. (A) Increase in unrestricted revenues, gains, and other support.
3. (C) Increase in temporarily restricted net assets.
4. (A) Increase in unrestricted revenues, gains, and other support.
5. (A) Increase in unrestricted revenues, gains, and other support.
6. (D) Increase in permanently restricted net assets.

NUMBER 2

Community Service, Inc.
Private Voluntary Health & Welfare Organization

Part A.

Solutions approach: Mark paragraph #1 as time restricted because Community implies a time restriction on future gifts. Label paragraph #2 as use restricted, paragraph #3 as a refundable advance and paragraph #4 as use restricted.

1. The correct answer is understated (U). Contributions receivable should be the two uncollected promises in paragraph #1 of $28,000 and paragraph #2 of $12,000 for a total of $40,000. This exceeds the $28,000 answer in the problem, so the answer is understated.

2. The correct answer is understated (U). Net assets released from use restrictions includes the Year 5 promise of $10,000 and the Year 6 promise of $20,000 in paragraph #2 collected and expended in Year 6 for scholarships (use restriction) plus the $37,000 expended in paragraph #4 for the purchase of a bus (use restriction) for a total of $67,000. This exceeds the $34,000 in the answer so the answer is understated (U).

3. The answer is correct (C). The only net asset released from time restrictions is the Year 5 promise of $22,000 in paragraph #1 collected in Year 6. The Year 6 promise in paragraph #1 of $95,000 is not included because the promise was made and collected in Year 6. Community implies a time restriction on promises to be collected in the future, not in the current year.

4. The answer is overstated (O). Contributions temporarily restricted include the uncollected Year 6 promise of $28,000 in paragraph #1 that is time restricted and the uncollected Year 6 promise of $12,000 in paragraph #2 that is use restricted. This total of $40,000 is less than the suggested answer of $97,000, so the answer is overstated.
Part B.

5. The correct answer is $88,000 (L). Since only the income can be spent by Community, the principal amount of the debt security endowment donated in paragraph #1 is permanently restricted. This contribution is recorded at its fair value of $88,000 at the time of receipt.

6. The correct answer is $5,000 (D). The only fees are the admission fees ($5,000) from the Music Festival in paragraph #4.

7. The correct answer is $8,000 (E). The investment income is the interest earned on the debt security endowment in paragraph #1 ($9,000) less the interest expense ($1,000) on the short-term bank loan in paragraph #8 for a net of $8,000. The dividend income in paragraph #3 is on equity securities and not on debt securities.

8. The correct answer is $99,000 (O). “Program Services are the activities that result in goods or services being distributed to beneficiaries, customers or members that fulfill the purposes or mission for which the organization exists.” (SFAS 117) Communities Programs Services include the reading materials distributed ($8,000) in paragraph #5, the instructors salaries in paragraph #6 ($26,000), the director’s salary in paragraph #7 ($50,000) and 75% ($15,000) of the space rental for a total of $99,000. Costs such as the salaries of the bookkeeper and the business manager are administrative expenses.

9. The correct answer is $2,000 (B). Since the problem excludes special events such as the music festival in paragraph #4, the only fund raising expenses would be the $2,000 paid for printing and mailing cost in paragraph #7.

10. The correct answer is 0 (A). The income on long-term investments – unrestricted is zero. The interest income on the debt security in paragraph #1 is restricted and the dividend income in paragraph #3 is on short-term investments, not long-term.

11. The correct answer is zero (A). The voluntary contributions of the 10 citizens in paragraph #2 are not recognized as revenue because they do not require special skills or create or enhance non-financial assets.

Part C

12. The correct answer is operating activities (O). Unrestricted promises collected are a part of the operating section of the statement of cash flows.

13. The correct answer is operating activities (O). Operating activities include all activities not defined as investing or financing activities. Since the cash inflow from a refundable advance does not meet the definition of an investing or financing activity, it is considered an operating activity.

14. The answer is investing (I). The purchase of a bus is an investing activity. The general rule is that all changes in assets that are not operational are considered investing activities.

15. The correct answer is financing (F). The principal payment on a short-term loan is a financing activity.

16. The correct answer is investing (I). The purchase of equity securities by Community is an investment and therefore an investing activity.

17. The answer is operating (O). Dividend income is an operating activity. As a general rule, all income statement items are considered operating.

18. The correct answer is operating (O). Interest expense on a short-term bank loan is considered an operating activity.

19. The correct answer is operating (O). Interest earned on endowment is an operating activity.