OBJECTIVES

After reading this chapter, you will be able to:

1. Explain the classification and valuation of investments.
2. Account for investments in trading debt and equity securities.
3. Account for investments in available-for-sale debt and equity securities.
4. Account for investments in held-to-maturity debt securities, including amortization of bond premiums and discounts.
5. Understand transfers and impairments.
6. Understand disclosures of investments.
7. Explain the conceptual issues regarding investments in marketable securities.
8. Account for investments using the equity method.
9. Describe additional issues for investments.
Investments: Classification and Valuation

1. A corporation acquires securities of other corporations or of the government for several different reasons: to obtain additional income by investing excess cash, to create long-term relationships with suppliers, or to obtain significant control over related companies. Companies may invest in common stock, preferred stock, and/or bonds of other corporations as well as municipal, state, or federal bonds. Each group of such investment securities is often referred to as a portfolio of marketable securities.

2. GAAP established generally accepted accounting principles for all investments in debt securities and those equity securities that have readily determinable fair values. A security has a readily determinable fair value if a sales price is currently available on a securities exchange registered with the SEC or in an over-the-counter market whose prices are publicly reported.

3. A company classifies investments in debt and equity "marketable" securities at acquisition, and on subsequent reporting dates, into one of the following three categories: (a) Trading Securities, debt and equity securities purchased and held principally for the purpose of selling them in the near future; (b) Available-for-Sale Securities, debt securities not classified as held to maturity, and debt and equity securities not classified as trading securities; and (c) Held-to-Maturity Debt Securities, those debt securities for which the company has the "positive intent and ability to hold the securities to maturity."

4. Debt securities, which represent a creditor relationship with another entity, include U.S. Treasury securities, municipal securities, corporate bonds, convertible debt, commercial paper, and preferred stocks that have a mandatory redemption feature or are redeemable at the option of the holder. Equity securities, which represent an ownership interest in another company, include common stocks, preferred stocks, preferred stocks that are redeemable at the option of the company that issued the stock, stock warrants, stock rights, and put and call options. Fair value is the amount at which a security could be exchanged in a current transaction between willing parties.

Investments in Debt and Equity Trading Securities

5. According to GAAP, investments in debt and equity securities classified as trading securities are initially recorded at cost and subsequently reported at fair value. Unrealized holding gains and losses (differences between the initial cost and the fair value at the balance sheet date) are included in net income of the current period. Interest and dividend revenue, as well as realized gains and losses on sales, are also included in net income of the current period.

6. Investments in debt and equity trading securities are held primarily by such institutions as banks and stockbrokers.

Investments in Available-for-Sale Debt and Equity Securities

7. The accounting principles for investments in available-for-sale debt and equity securities are: (a) the investment is initially recorded at cost, (b) it is subsequently reported at fair value, (c) unrealized holding gains and losses are reported as a component of other comprehensive income, and (d) interest and dividend revenue, as well as realized gains and losses on sales, are included in net income for the current period.
Investments in Held-to-Maturity Debt Securities

8. The generally accepted accounting principles for investments in held-to-maturity debt securities are: (a) the investment is initially recorded at cost, (b) it is subsequently reported at amortized cost, (c) unrealized holding gains and losses are not recorded, and (d) interest revenue and gains and losses on disposal (if any) are all included in net income.

Transfers and Impairments

9. Although transfers between categories should generally be rare, the transfer of a security between categories is accounted for at the fair value at the time of the transfer. In the journal entry to record the transfer, the fair value is used as the "new" investment carrying value, and the "old" investment carrying value is eliminated. The accounting for any related unrealized gain or loss varies depending on the type of transfer.

10. Impairment occurs when a decline in value below the amortized cost of the debt security classified as available for sale or held to maturity is deemed to be other than temporary, and it is, therefore, probable that an investor company will be unable to collect all amounts due. In such cases the company writes down the amortized cost of the security to the fair value, and includes the amount of the write-down in net income as a realized loss. The fair value becomes the new "cost" and subsequent changes in fair value are accounted for as originally described.

Disclosures

11. GAAP requires the following disclosures related to investments in securities: (a) Trading Securities: the change in the net unrealized holding gain or loss included in each income statement must be disclosed; (b) Available-for-Sale Securities includes: disclosure for each balance sheet date includes the aggregate fair value, gross unrealized holding gains and gross unrealized holding losses, amortized cost by major security type, and the contractual maturities of debt securities; and for each income statement period, the proceeds from sales and the gross realized gains and losses on those sales, the basis on which cost was determined, the gross gains and losses included in net income from transfers of securities from this category into the trading category, and the change in the net unrealized holding gain or loss included as a separate component of other comprehensive income; (c) Held-to-Maturity Debt Securities: disclosure includes, for each balance sheet date, the aggregate fair value, gross unrealized holding gains or losses, amortized cost by major security type, and contractual maturities; as well as for any sales or transfers from this category, the amortized cost, the related realized or unrealized gain or loss, and the circumstances leading to the decision to sell or transfer the security.

12. Investments in trading securities are classified as current assets. Investments in available-for-sale securities are classified as current assets if they will be sold within one year or the operating cycle, whichever is longer. Otherwise, they are noncurrent. Investments in held-to-maturity debt securities are classified as noncurrent assets unless they mature within the next year.

Conceptual Evaluation

13. Before the current GAAP was established, the lower of cost or market method was used to account for investments in marketable equity securities. Most companies used the cost method to account for investments in debt securities. The lower of cost or market method was criticized for lacking relevancy, because it did not reflect the liquidity of the company (security) when the fair value exceeded the cost, and for allowing "gains trading," (i.e., sales of securities only when those securities had fair values above cost).
14. There are four major controversies related to the revised principles: (a) in an attempt to choose values that would present information that is relevant, fair value is required in the balance sheet for trading securities and available-for-sale securities, whereas amortized cost is required for held-to-maturity securities; (b) fair value is not required for certain liabilities because of the difficulty determining which liabilities should be reported this way and the difficulty obtaining a reliable value; (c) unrealized holding gains and losses are reported in net income for trading securities to provide more relevant information for investors about the results of economic events that occur in the period and the company's return on investment; but directly in other comprehensive income for available-for-sale securities in order to avoid unnecessary volatility in reported net income; and (d) the classification of securities is based on management intent and thus may result in inconsistent application of the principles, a related lack of comparability and insufficient relevance.

**Equity Method**

15. The equity method of accounting (a) acknowledges the existence of a material economic relationship between the investor and the investee, (b) is based on the requirements of accrual accounting, and (c) reflects the change in stockholders' equity of the investee company. APB Opinion No. 18 stipulates that an investor use the equity method to account for an investment in equity securities if the ownership allows the investor to exercise significant influence over the operating and financial policies of an investee. Generally speaking, this presumption is made if the investment is 20% or more of the outstanding common stock. In every case, however, the degree of influence in the investee company and not the percentage ownership is the determining factor. Therefore, certain circumstances preclude the use of the method even though 20% or more of the investee's common stock is held, and other circumstances mandate the use of the method even though less than 20% of the common stock is held.

16. The investor discloses the carrying value of the investment in stock account, determined by adding the investor's share of investee net income and subtracting dividends, depreciation, and any goodwill impairment in the long-term investment section of its balance sheet. The total amount of the investor's share of the investee's net income (as adjusted) is disclosed on the investor's income statement. The notes to the financial statements include a schedule reconciling the investor's share of the investee's ordinary income with the net investment income reported as Other Revenue.

17. If an investor acquires enough additional shares during a year to exercise significant influence over the investee, a change from the fair value method to the equity method is required. When the equity method is adopted, the investor restates its investment in the investee by debiting the Investment account and crediting Retained Earnings for its previous percentage of investee income (less dividends) for the period from the date of acquisition to the date it obtained significant influence. The restatement is a prior period (retroactive) adjustment. The company also eliminates any amounts included in the Allowance and Unrealized Increase/Decrease accounts that recorded these shares at fair value. Thereafter, the investor applies the equity method in the usual manner based on the current percentage ownership.

18. If the investor sells enough stock to justify switching from the equity method to the fair value method, the investor should apply the fair value method subsequent to the date of change (prospectively). Previously recorded income remains as part of the Investment account.

19. An investor recognizes declines other than temporary in the value of investments accounted for under the equity method by debiting a Loss account and crediting the Investment account for the difference between the carrying value of the investment and the fair value. The investor does not recognize recoveries.
20. If an investor using the equity method acquires control over the operations of the investee, consolidated financial statements are prepared. In preparing such statements, the investor eliminates intercompany sales and profits and does not disclose intercompany receivables and payables in the consolidated financial reports. Although there may not be legal substance to the consolidation, the economic substance necessitates the consolidated reporting.

Additional Issues for Investments

21. Nonmarketable securities, shares, or bonds issued by privately held companies are outside the scope of GAAP. Therefore, there is no requirement to report them at fair value, and they are typically reported at historical cost.

22. When an investor receives additional shares of stock from either a stock dividend or a stock split, the investor's relative percentage of ownership remains the same, and it records no income. However, because the investment is now spread over a larger number of shares, a memorandum journal entry is necessary to record the new average cost per share to be used in subsequent transactions.

23. Stock warrants issued to existing stockholders allow the stockholders to purchase a specified number of additional shares of stock at a predetermined price, usually slightly less than their current market price. Because the warrants are traded on the stock market soon after issuance, the holder can either purchase additional shares of stock by exercising the warrants or sell the stock warrants. When the warrants (rights) are received, the investor assigns a part of the carrying value of the existing common stock to the rights as discussed in Chapter 15, Investments.

24. A company reports the cash surrender value of life insurance held by the company on key officers of the organization as a long-term investment on its balance sheet. The cash surrender value is that accumulated portion of the annual premium that will be returned to the company in the event of policy cancellation. The company records the portion of the annual premium that does not increase the cash surrender value as insurance expense. The insurance expense is reduced by any dividends received on the policy. In the event of death, the company reports the difference between the proceeds and the cash surrender value of the policy as an ordinary gain.

25. When a company sets aside cash and other assets to accomplish specific future objectives, it establishes a fund. The most common long-term funds are those that are established in order to retire long-term liabilities (sinking funds), to retire preferred stock (stock redemption funds), or to purchase long-term assets (plant expansion funds). A company reports its long-term funds as investments on the balance sheet. The operations of these funds include the contribution of cash to the fund, investing the fund cash, receiving revenue, paying expenses, selling investments, and using the cash in the fund to achieve the established objective (e.g., retire bonds). Accounting for long-term funds requires a separate set of accounts to record the above transactions such as Sinking Fund Cash, Sinking Fund Securities, Sinking Fund Revenues, and Sinking Fund Expenses.
SELF-EVALUATION EXERCISES

True-False Questions

Determine whether each of the following statements is true or false.

1. A security has a readily determinable fair value if a sales price is currently available on a securities exchange registered with the SEC or in an over-the-counter market whose prices are publicly reported.
   Answer: True
   FASB Statement No. 115 accepts that a security has a readily determinable fair value if that security is traded on a securities exchange registered with the SEC or in an over-the-counter market that publicly reports prices.

2. Debt securities not classified as held to maturity are classified as trading securities.
   Answer: False
   Debt securities not classified as held to maturity can be classified as either trading securities or available-for-sale securities, not just trading securities.

3. Fair value is the amount at which a security could be exchanged in a current transaction between willing parties.
   Answer: True
   Fair value is the amount that a security could be exchanged by two willing parties and is determined by the quoted market price of the security on an SEC-registered exchange or the published prices of an over-the-counter market.

4. According to GAAP, unrealized holding gains and losses on investments in debt and equity securities classified as trading securities are reported as a separate component of stockholders' equity.
   Answer: False
   Unrealized holding gains and losses on investments in debt and equity securities classified as trading securities are reported in the company's net income. Available-for-sale securities unrealized holding gains and losses are reported as a separate component of stockholders' equity.

5. According to GAAP, unrealized holding gains and losses on investments in held-to-maturity debt securities are not recorded.
   Answer: True
   Unrealized holding gains and losses on investments in held-to-maturity debt securities are not recorded. This is because the bond is not intended to be sold before maturity and therefore there will be no gain or loss based on the current fair value, only interest revenue.

6. Realized gains and losses on sales of investments in available-for-sale debt and equity securities and investments in trading securities are included in net income for the current period.
   Answer: True
   All realized gains and losses (realized gains and losses result from the actual sale of the security) are included in net income in the current period, which is the period in which they were sold.

7. Investments in held-to-maturity debt securities are initially recorded at cost and subsequently reported at fair value.
   Answer: False
   Investments in held-to-maturity debt securities are initially recorded at cost; however, they are subsequently reported at their amortized cost (face value plus (less) any unamortized premium (discount)).
8. Like debtor companies, investor companies use a separate valuation account to record the premiums and discounts on investments in bonds that are classified as held to maturity.  

Answer: False  
The accounting for bonds is almost the mirror image for investors when compared to the issuing company with one exception: investor companies do not use a separate account to record the discount or premium and the actual investment. (Recall that a bond issuer always recorded bonds payable at face value and had a separate account for the discount or premium). For the investor, the amortization of the discount or premium on bonds is done directly in the investment account.

9. The amortization of a bond premium results in an effective interest rate lower than the stated rate.  

Answer: True  
A premium on a bond is an amount paid above the face value of the bond. So when an investor pays a premium, they are paying more than the face value. However, the stated interest rate is based on the face value. Therefore, the investor is receiving interest payments based on the face value that is less than what they paid for the bond, which results in the effective interest rate being lower than the stated interest rate.

10. Consistent with the conservatism principle, the transfer of a security between categories is accounted for at its historical cost.  

Answer: False  
The transfer of a security between investment categories is accounted for at the fair value of the security at the time of the transfer.

11. For a transfer into the available-for-sale category from the held-to-maturity category, an unrealized holding gain or loss is established and included in net income.  

Answer: False  
In this situation, an unrealized holding gain or loss is established; however, the unrealized gain or loss is included in other comprehensive income, not net income.

12. For a transfer of an available-for-sale debt security into the held-to-maturity category, an unrealized holding gain or loss on the available-for-sale security is eliminated, and an unrealized holding gain or loss on the held-to-maturity debt security is created and included in other comprehensive income.  

Answer: True  
An unrealized holding gain or loss on the available-for-sale security is eliminated, and an unrealized holding gain or loss on the held-to-maturity debt security is created and included in other comprehensive income. In addition, the amount of the unrealized holding gain or loss is amortized over the remaining life of the security.

13. When impairment occurs, the amortized cost of the security is written down to the fair value, and the amount of the write-down is included in stockholders’ equity.  

Answer: False  
When impairment occurs, the amortized cost of the security is written down to the fair value; however, the amount of the write-down is included in net income as a realized loss.

14. Investments in held-to-maturity debt securities are always classified as noncurrent assets.  

Answer: False  
Investments in held-to-maturity debt securities are classified as noncurrent assets unless they mature within the next year and then they are reported as current assets.
15. Under GAAP, fair value is required in the balance sheet for trading securities and available-for-sale securities, whereas amortized cost is required for held-to-maturity securities.

**Answer: True**
Trading and available-for-sale securities are reported at fair value, which is relevant to the securities because they may be sold at some point in the future and fair value represents a more accurate picture of what the security is worth than historical cost. Held-to-maturity debt securities are valued at amortized cost. Fair value is not relevant for these securities because they will not be sold.

16. Under the equity method, the receipt of cash dividends reduces the carrying value of the Investment in Stock account.

**Answer: True**
In the equity method, a receipt of a cash dividend represents a return of capital and is considered a reduction in the investment.

17. If an investment in equity securities is accounted for using the equity method, revenue that is recorded by the investor as a result of a sales transaction between the investee and the investor must be eliminated by the investor.

**Answer: True**
Because a material relationship is assumed under the equity method, care must be taken to eliminate intercompany transactions that would affect the income of the investor and the expenses of the investee. To do this we eliminate revenue that was recorded by the investor and expenses recorded by the investee in transactions between the two entities.

18. Under the equity method, the Investment in Stock account is decreased by a proportionate share of the investee's reported net income.

**Answer: False**
Under the equity method, the investor's proportional share of the investee's income is considered an increase, not a decrease in the Investment in Stock account.

19. When the method used to account for an investment in equity securities is changed from the fair value method to the equity method, retained earnings is increased by the amount of the investor's previous percentage of investee income from the original date of acquisition to the date that it obtained significant influence.

**Answer: True**
A retrospective adjustment is made to increase the retained earnings for all of the investee's income (less dividends) from the date of original acquisition to the date that significant influence was obtained.

20. Stock dividends and stock splits increase the value of the Investment in Stock account.

**Answer: False**
Stock dividends and splits do NOT increase the value of the Investment in Stock account because the percentage share of ownership has not changed.

21. Because stock warrants are traded on the stock market soon after issuance, the value assigned to stock warrants received by a stockholder is equal to the current market value of the warrants.

**Answer: False**
The warrants must be assigned a value, but because the investor did not pay to receive the warrants, we must allocate the original cost of the stock to the value of the stock and warrants, similar to what we did in Chapter 15.
22. Upon the death of an insured officer, a company reports the difference between the proceeds from the life insurance policy and the cash surrender value of the policy as ordinary gain.

Answer: True

Because the cash surrender value of the insurance policy has been reported, it would need to be closed out when the insurance proceeds are received. The difference between the surrender value and the proceeds received is a gain. It is considered ordinary because insuring officers' lives is a normal operating procedure.

23. A fund involves the setting aside of cash and other assets to accomplish specific objectives.

Answer: True

Funds are used to set aside assets for future use. Among the most common of these funds would be a sinking fund that is used to accumulate cash to retire outstanding debt.

Multiple Choice Questions

Select the one best answer for each of the following questions.

1. On July 1, Sada Corporation acquired 100 shares of Radon Corporation common stock at $80 per share and 200 shares of Greenco Corporation common stock at $50 a share. Six months later, on December 31, the Radon stock had a fair value of $75 a share and the Greenco Corporation stock had a fair value of $56 a share. These shares are classified as available-for-sale equity securities. In its December 31 year-end financial statements, Sada should include which of the following?

(a) $700 unrealized holding gain as a component of accumulated other comprehensive income on the balance sheet
(b) $700 unrealized holding gain on the income statement
(c) $500 unrealized holding loss as a component of accumulated other comprehensive income on the balance sheet
(d) $1,200 unrealized holding gain as a component of accumulated other comprehensive income on the balance sheet

Answer: (a) $700 unrealized holding gain as a component of accumulated other comprehensive income on the balance sheet

From these two transactions Sada has experienced an unrealized loss of $500 (Radon stock went from $80 per share to $75 per share, a loss of $5 per share x 100 shares = $500 loss) and an unrealized gain of $1,200 (Greenco stock went from $50 per share to $56 per share, a gain of $6 per share x 200 shares = $1,200 gain). Because these stocks are classified as available for sale, this total unrealized gain of $700 ($1,200 gain - $500 loss) would be reported as a component of other comprehensive income on the balance sheet.

Answer (b) is incorrect because unrealized gains or losses on available-for-sale securities are reported as a component of other comprehensive income on the balance sheet. Answer (c) is incorrect because it only takes into consideration the unrealized loss on the Radon stock and ignores the unrealized gain on the Greenco stock. Answer (d) is incorrect because it neglects the effects of the Radon stock.
2. Generally accepted accounting principles for investments in debt and equity securities classified as trading securities include all of the following except:
   (a) the investment is initially recorded at cost.
   (b) the investment is subsequently reported at fair value.
   (c) unrealized holding gains and losses are included as a separate component of stockholders’ equity.
   (d) interest and dividend revenue are included in income of the current period.

   **Answer:** (c)

   Unrealized holding gains and losses are included as a separate component of stockholders' equity.

   Unrealized losses or gains on trading stocks are reported as a component of net income on the income statement and not as a separate component of stockholders’ equity on the balance sheet. Therefore, answer (c) is not included as proper GAAP for trading securities and is the exception of these four statements.

   Answer (a) is not an exception to GAAP because the investment is initially recorded at cost. Trading securities are reported at fair value, therefore answer (b) is not an exception to GAAP. Dividends and interest received are included in net income of the current period so answer (d) is not an exception to GAAP.

3. The original cost of a portfolio of available-for-sale equity securities is $25,500. On December 31, 2011, the fair value of the portfolio was $27,000 and the Allowance for Change in Value of Investment account has a debit balance of $1,500. On December 31, 2012, the fair value of the portfolio is $26,000. To record the change in value, the Allowance account should be:
   (a) credited for $500.
   (b) credited for $1,000.
   (c) credited for $1,500.
   (d) credited for $2,500.

   **Answer:** (b) credited for $1,000.

   The balance in the allowance account should reflect the difference between the original cost of the securities ($25,500) and the fair value of the securities ($26,000), which is $500 ($26,000 – $25,500). Because the fair value is higher than the original cost, the amount in the allowance account should be a debit. Therefore, the allowance account should have a $500 debit balance. Prior to this transaction the allowance account has a $1,500 debit balance. In order to achieve the desired balance the allowance account needs a $1,000 credit entry.

   Answer (a) is incorrect because it would leave the allowance account with a $1,000 debit balance, which does not reflect the appropriate amount. Answer (c) is incorrect because it would leave a $0 balance in the allowance account. Answer (d) is incorrect because it would leave a $1,000 credit balance in the allowance account.
4. Penway Company had the following portfolio of available-for-sale equity securities:

<table>
<thead>
<tr>
<th>Security</th>
<th>Cost</th>
<th>Fair Value</th>
<th>Change in Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 shares</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company A stock</td>
<td>$2,000</td>
<td>$2,500</td>
<td>$500</td>
</tr>
<tr>
<td>150 shares</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company B stock</td>
<td>1,500</td>
<td>2,200</td>
<td>700</td>
</tr>
<tr>
<td>200 shares</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company C stock</td>
<td>4,000</td>
<td>3,600</td>
<td>(400)</td>
</tr>
<tr>
<td></td>
<td>$7,500</td>
<td>$8,300</td>
<td>$800</td>
</tr>
</tbody>
</table>

If Penway sells the 150 shares of Company B stock for $2,100 during 2012, the entry to record the sale will include:

(a) a $600 Gain on Sale of Available-for-Sale Securities.
(b) a $100 Loss on Sale of Available-for-Sale Securities.
(c) a $1,300 Gain on Sale of Available-for-Sale Securities.
(d) a $100 Gain on Sale of Available-for-Sale Securities.

Answer: (a) a $600 Gain on Sale of Available-for-Sale Securities.

Company B stock was originally purchased for $1,500 and sold for $2,100. This means that Penway has realized a $600 gain on this stock and would recognize this in the current period as a gain on the sale of available-for-sale securities. All realized gains and losses on available-for-sale securities are recognized and determined by calculating the difference between original cost and actual sales proceeds.

Answer (b) is incorrect because it reflects the difference between the last reported fair value of the stock ($2,200) and the sale of the stock ($2,100). A realized gain has not been recognized on this stock, only unrealized gains. Answer (c) is incorrect because a $1,300 gain on the sale of Company B stock would have required the sale price to be $2,800 instead of the $2,100 actual sales price. Answer (d) is incorrect because while the $100 represents the difference between the last reported fair value and the actual proceeds, the original cost should be used instead of the last reported fair value to determine the realized gain or loss.

5. GAAP requires all of the following disclosures related to investments in available-for-sale securities except:

(a) the aggregate fair value.
(b) gross unrealized holding gains and gross unrealized holding losses.
(c) the circumstances leading to decisions to sell or transfer securities.
(d) the change in the net unrealized holding gain or loss included as a separate component of other comprehensive income.

Answer: (c) the circumstances leading to decisions to sell or transfer securities.

Companies are not required to report the circumstances leading to the decision to sell or transfer available-for-sale securities.

Answers (a), (b), and (d) are all required disclosures for available-for-sale securities.
6. On July 1, 2011, Hudson Company acquired an investment in bonds that will be held to maturity with a face value of $100,000 for $106,046. These bonds carry a stated interest rate of 8%, payable semiannually, and mature on June 30, 2012. The bonds yield an effective interest rate of 7%. If Hudson uses the effective interest method to account for the bonds, the balance reported on the December 31, 2011, balance sheet in Investment in Held-to-Maturity Debt Securities should be:

(a) $105,757.61.
(b) $105,804.16.
(c) $100,000.
(d) $105,469.22.

**Answer:** (a) $105,757.61.

To determine the balance sheet value of these bonds, you need to amortize a portion of the $6,046 premium that Hudson paid for these bonds. To do this you would multiply the effective rate for the period of July 1, 2011, to December 31, 2011, (7% annual ÷ 2 periods per year = 3.5%) by the cost ($106,046). This would result in an effective interest payment of $3711.61. Subtract this amount from the actual interest payment of $4,000 (Face Value ($100,000) x Stated rate (8% ÷ 2 periods)) to determine how much of the premium we have amortized in this period. The result is $288.39. We then subtract this amount from the original balance of $106,046 to arrive at the answer of $105,757.61.

Answer (b) is incorrect because the stated rate of 4% (8% ÷ 2) was used to calculate the amount of premium to amortize instead of using the effective interest rate 3.5% (7% ÷ 2). Answer (c) is incorrect because this is the face value, not the amortized cost of the bonds. Answer (d) is incorrect because the effective interest rate was not divided by two to represent the two periods per year.

7. When a bond is purchased at a discount, amortization of the discount causes periodic interest revenue to be:

(a) not affected.
(b) decreased.
(c) increased.
(d) calculated by multiplying the face value times the effective interest rate.

**Answer:** (c) increased.

A discount on a bond is an amount paid below the face value of the bond. So when an investor buys a bond at a discount, they are paying less than the face value. However, the stated interest rate is based on the face value. Therefore, the investor is receiving interest payments based on the face value that is more than what they paid for the bond, which results in increased periodic interest revenue as the discount is amortized.

Answer (a) is incorrect because a premium and a discount mean that the interest revenue will be affected. Answer (b) would be correct if the bond were purchased at a premium. Answer (d) is incorrect. The effective interest rate is never multiplied by the face value when doing bond calculations.
8. On January 1, 2011, Company Y acquired 25% of Company Z's voting stock for $30,000, and uses the equity method to account for the investment. The purchase price of the shares was equal to their book value. During 2011, Company Z declares dividends of $20,000 and reports net income of $50,000. On December 31, 2011, the balance in Company Y's Investment in Stock: Company Z account will be:

(a) $30,000.
(b) $37,500.
(c) $22,500.
(d) $60,000.

Answer: (b) $37,500.

When the equity method is used to account for the investment in another company, a share of the income based on percentage of ownership of the investment company (Company Z) is debited to the investment account. Any dividends received from Company Z are credited to the investment account. The investment account starts out with a balance of $30,000 (the initial investment). It is increased by $12,500, which represents Y's share (25%) of Z's income. It is then decreased by $5,000, which is Y's share of the dividends that Z pays. Therefore, the final investment account balance is $37,500 ($30,000 + $12,500 − $5,000).

Answer (a) is incorrect because it does not reflect any of the income or dividends that Z produces during the year as required when using the equity method. Answer (c) is incorrect because the income was deducted and the dividends added to the original investment, which is the opposite of what should be done. Answer (d) is incorrect because it uses all of Z's net income and dividends and does not use just Y's share (25%) of these items.

9. The equity method of accounting for an investment in equity securities is required if the:

(a) investment includes both common and preferred stock.
(b) investor obtains 20% or more of the investee's outstanding common stock.
(c) investment enables the investor to exercise significant influence over the operations of the investee, even if the amount of stock obtained is less than 20%.
(d) investor obtains more than 50% of the investee's outstanding common stock acquired in exchange for property, goods, or services.

Answer: (c) investment enables the investor to exercise significant influence over the operations of the investee, even if the amount of stock obtained is less than 20%.

The equity method of accounting for investments in common stock is required when an investor is able to exercise significant influence over the operating and financial policies of an investee. There is no minimum amount of stock that must be obtained as long as the investor has significant influence over the investee.

Answer (a) is incorrect because a company that owns a minimal amount of both common stock and preferred stock is not required to use the equity method. Answer (b) could potentially be correct, but answer (c) is a better choice. While the 20% threshold leads to the presumption of significant influence, it does not by itself constitute significant influence. Company A could own 25% of a Company Z and Company B could own the remaining 75% of Company Z. In this scenario, despite A owning more than 20%, because B owns 75% it would control the company. Answer (d) is incorrect because when a company owns greater than 50% they have control over the company and the two companies are required to prepare consolidated financial statements.
10. The investor's depreciation of the increase in the recorded value of the investee depreciable assets acquired should be recorded under the equity method as:
   (a) a decrease in the investee reported net income that is recognized by the investor.
   (b) an increase in the investor's related long-term investment in equity securities account.
   (c) a decrease in stockholders' equity and reported in a separate section of stockholders' equity below Contributed Capital and preceding Retained Earnings.
   (d) an increase to the Investor's Depreciation Expense account and reported on the investor's income statement as an operating expense.

Answer: (a) a decrease in the investee reported net income that is recognized by the investor.

When a company uses the equity method for an investment in another company, that company will usually have assets that the company depreciates. If the fair value of the assets is greater than the book value of the assets when the investor acquires the stock, the investor must depreciate this difference in values. The depreciation of this amount is accounted for as a decrease in the income from the investee.

Answer (b) is incorrect because the depreciation reduces the amount in the investment account by reducing the amount of income from the investment. Answer (c) is incorrect because this is not reported in the stockholders' equity section of the balance sheet. It is reported as part of the investment, which is an asset. Answer (d) is incorrect because this depreciation does not represent depreciation from the operations of the investor. Instead it is reported as part of the investment account.

11. Staple Corporation purchases life insurance policies on its key officers. The policies have a cash surrender value clause. At the beginning of 2011, Staple paid $15,000 in insurance premiums for the year. The cash surrender value of the policies increased from $104,150 to $108,350 during 2011. For 2011, Staple would recognize insurance expense on these policies of:
   (a) $15,000.
   (b) $4,200.
   (c) $10,800.
   (d) $19,200.

Answer: (c) $10,800.

Insurance expenses on policies that have a cash surrender value are the difference between the premiums paid and the increase in the cash surrender value of the policies. In this question, the company paid $15,000 and the cash surrender value increased by $4,200 ($108,350 − $104,150 = $4,200). Therefore, the insurance expense for the year is $15,000 − $4,200 = $10,800.

Answer (a) is incorrect because it does not take into consideration the increase in the cash surrender value of the policies. Answer (b) is incorrect because it does not take into consideration the amount paid in insurance premiums. Answer (d) is incorrect because it added the amount paid and the increase in cash surrender value instead of using the difference between these items.
12. Quick Company has established a sinking fund to retire an outstanding bond issue. During 2011, Quick collected $20,000 in interest from investments in sinking fund securities. The receipt of the interest would be recorded in Quick Company’s:
(a) Investment Revenue account.
(b) Sinking Fund Revenue account.
(c) Investment in Stock account.
(d) Sinking Fund Securities account.

Answer: (b) Sinking Fund Revenue account.

Accounting for long-term funds, such as a bond sinking fund uses separate accounts with the revenue and expenses recorded directly into the account. Because the receipt of the interest on the securities is revenue to the sinking fund, it is recorded in the Sinking Fund Revenue account.

Answer (a) is incorrect because sinking funds are accounted for separately and this revenue would be recorded in the Sinking Fund Revenue account. This sinking fund revenue would, however, be a component of investment revenue on the income statement for the year in which the interest was received. Answer (c) is incorrect because while these are investments, they are earmarked for a specific purpose and are accounted for separately. Answer (d) is incorrect because the company needs to record the receipt of the interest into a revenue account so that it can be reported on the income statement.

Problem-Solving Strategies

Investments in Available-for-Sale Debt and Equity Securities

When a company makes an investment in available-for-sale securities, it debits the Investment in available-for-sale securities account and credits cash. If a company purchases bonds between interest dates, it must record any accrued interest it paid separately from the purchase price.

Assume that we purchase the following securities on November 1, 2011:

- Forsyth common stock 200 shares @ $25 per share = $5,000
- Witmer common stock 500 shares @ $12 per share = $6,000
- Kelley corporate bonds 4 bonds @ par ($1,000). The bonds pay 12% interest semiannually on January 1 and July 1.

Strategy: The initial cost of investments in available-for-sale debt and equity securities includes the market price plus any brokerage fees and taxes paid to acquire the securities.

The entry to record this purchase would be:

\[
\begin{align*}
\text{Investment in available for sale securities} & \quad 15,000 \\
\text{Interest revenue} & \quad 160 \\
\text{Cash} & \quad 15,160
\end{align*}
\]

The accrued interest revenue is $160 ($4,000 in bonds x 12% x 4/12).
We will record interest revenue as it is earned and dividend revenue when it is received. Therefore, on December 31, 2011, we record the interest we earned on the Kelley corporate bonds, even though we will not receive it until January 1, 2012:

\[
\begin{align*}
\text{Interest receivable} & \quad 240 \\
\text{Interest revenue} (\$4,000 \times 12\% \times \frac{1}{2}) & \quad 240
\end{align*}
\]

Notice our interest revenue account after these two entries will only be a total of $80 for the period. This is because we debited interest revenue for the accrued interest of $160 and credited interest revenue for $240. Which leaves a total credit of $80 ($240 − $160 = $80). Because we only owned the bonds for two months (November and December), we only earned two months of interest.

When we receive the January 1 payment, the entry will be:

\[
\begin{align*}
\text{Cash} & \quad 240 \\
\text{Interest receivable} & \quad 240
\end{align*}
\]

To record dividends received, we simply debit cash and credit dividend revenue.

On the balance sheet date companies report their investments in available-for-sale securities at fair value. These fair values are determined by the year-end prices on a securities exchange. The entry to reflect these fair values are accomplished by the following steps:

1. Determine the current fair value of the investments.
2. Determine the difference between the fair value and the cost of the investments.
3. The difference calculated in step 3 above is the amount that is required in the Allowance for Change in Value of Investment account. This allowance account is an adjunct/contra account to the Investment in Available-for-Sale Securities account. If the fair value is greater than the original cost, the allowance account will have a debit balance, and is an adjunct account to the original investment account. If the fair value is less than the original cost then the allowance account will have a credit balance. (Adjunct accounts are added to their related account; contra accounts are subtracted from their related account.)
4. If an allowance account already exists from previous years, it must be adjusted to have the correct debit or credit balance as determined in step 3 above.
5. Once the correct amount and direction (debit or credit) is determined for the allowance account, a journal entry is made. One-half of the journal entry will be to the allowance account in the direction and amount determined above. The other half of the transaction will be to an account called the Unrealized Increase/ Decrease in Value of Available-for-Sale Securities. This account is an adjunct or contra (depending on the balance) to stockholders' equity. The change in this account is included in Other Comprehensive Income for the year, and its balance is included in Accumulated Other Comprehensive Income.
Let's do an example to illustrate these steps using the information in the table below:

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>12/31/2011</th>
<th>12/31/2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forsyth stock</td>
<td>$5,000</td>
<td>$5,400</td>
<td>$6,000</td>
</tr>
<tr>
<td>Witmer stock</td>
<td>$6,000</td>
<td>$5,800</td>
<td>$5,200</td>
</tr>
<tr>
<td>Kelley bonds</td>
<td>$4,000</td>
<td>$4,100</td>
<td>$3,600</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$15,000</td>
<td>$15,300</td>
<td>$14,800</td>
</tr>
</tbody>
</table>

For 12/31/2011:

1. The fair value of the investments is $15,300.
2. This is a $300 increase compared to the cost of the investments.
3. Therefore the Allowance for Change in Value of Investment account should have a $300 balance.
   Because the fair value is greater than the original cost, the allowance account will have a debit balance.
4. There is no existing allowance account.
5. The journal entry to record this information would be:

   \[
   \begin{align*}
   \text{Allowance for Change in Value of Investment} & \quad 300 \\
   \text{Unrealized Increase/ Decrease in Value of Available-for-Sale Securities} & \quad 300
   \end{align*}
   \]

For 12/31/2012:

1. The fair value of the investments is $14,800.
2. This is a $200 decrease compared to the cost of the investments.
3. Therefore the Allowance for Change in Value of Investment account should have a $200 balance.
   Because the fair value is less than the original cost, the allowance account will have a credit balance.
4. The existing allowance account has a $300 debit balance from 2011. Therefore, in order to get to a $200 credit balance we will need to credit the allowance account for $500.
5. The journal entry to record this information would be:

   \[
   \begin{align*}
   \text{Unrealized Increase/ Decrease in Value of Available-for-Sale Securities} & \quad 500 \\
   \text{Allowance for Change in Value of Investment} & \quad 500
   \end{align*}
   \]

When a company actually sells a security it then realizes a gain or loss on the sale. This realized gain or loss is recorded in an account called Gain (Loss) on Sale of Available-for-Sale Securities, which is reported in net income. The realized gain or loss is measured as the difference between the selling price and the cost (of an equity security) or the amortized cost (of a debt security). The company "reverses" out of the accounts the cumulative balance in both the Allowance account and the Unrealized Increase/Decrease account reported at the previous balance sheet date.

Assume that we sell the Forsyth company stock on 5/31/2013 for $5,850. The company will realize a gain of $850 on this sale ($5,850 selling price – $5,000 cost = $850 gain) and record it like this:

\[
\begin{align*}
\text{Cash} & \quad 5,850 \\
\text{Gain on Sale of Available-for-Sale Securities} & \quad 850
\end{align*}
\]
In addition to this entry, we need to “reverse” the effects of the Forsyth company stock in both the Allowance account and the Unrealized Increase/Decrease account. On the balance sheet date prior to the sale (12/31/2012) the Forsyth stock had a fair value of $6,000. This represented a $1,000 unrealized gain over the original cost of $5,000. The entry to accomplish this would be:

Unrealized Increase/ Decrease in Value of Available-for-Sale Securities 1,000
Allowance for Change in Value of Investment 1,000

**Investments in Held-to-Maturity Securities**

The accounting for investments in bonds is very similar to the accounting for bond liabilities that we discussed in Chapter 14. The major difference is that unlike debtor companies, investor companies do not use a separate valuation account to record the premiums and discounts on investments in bonds. Instead, a company records the acquisition price (face value + premium or - discount) in the Investment in Held-to-Maturity Debt Securities account. This account is directly adjusted for any premium and discount amortization. The balance in this account at the balance sheet date is reported at its carrying value. A debtor would net the premium or discount against the bonds payable account (face value of the bonds) to determine the carrying amount of the debt.

Just like with bond issuers, bondholders must amortize any premium or discount associated with their investments in bonds to interest revenue over the remaining life of the bonds in order to assign the proper amount of interest revenue to each period. To account for premiums and discounts, the company must use the effective interest method (as described in Chapter 14) unless the straight-line method does not result in a material difference in the amount of interest revenue recognized in any year.

The amortization of a bond premium results in an effective interest rate lower than the stated rate. The company records the premium amortization when it receives interest as follows:

Cash XXX
Investment in Held-to-Maturity Debt Securities XXX
Interest Revenue XXX

The amortization of a bond discount results in an effective interest rate higher than the stated rate. A company records the discount amortization and the receipt of interest using the following journal entry:

Cash XXX
Investment in Held-to-Maturity Debt Securities XXX
Interest Revenue XXX

The sale prior to maturity of an investment in bonds classified as being held-to-maturity should be rare. However, such a sale of appropriately classified securities may occur with certain changes of circumstances. When a company sells an investment in held-to-maturity bonds before maturity, the purchaser must pay the sale price plus any interest earned since the last interest payment date. Before a company can determine a gain or loss on the sale, it must amortize any premium or discount on the bonds from the last interest date to the sales date. Then it compares the carrying value of the bonds with the sales price (excluding accrued interest) to determine any gain or loss. The gain or loss is normally reported as ordinary income (loss).

**Transfers and Impairments**

Although transfers between categories should generally be rare, the transfer of a security between categories is accounted for at the fair value at the time of the transfer. In the journal entry to record the
transfer, the fair value is used as the "new" investment carrying value, and the "old" investment carrying value is eliminated. The accounting for any related unrealized gain or loss varies depending on the type of transfer.

In a transfer from the trading category, no additional accounting for the unrealized holding gain or loss is necessary because it has already been recognized in net income.

For a transfer into the trading category, the previous unrealized holding gain or loss is eliminated and a gain or loss is included in net income. The gain (loss) is recorded in a Gain (Loss) on Transfer of Securities account.

For a transfer into the available-for-sale category from the held-to-maturity category, an unrealized holding gain or loss is established and included in other comprehensive income.

For a transfer of an available-for-sale debt security into the held-to-maturity category, the unrealized holding gain or loss on the available-for-sale security is eliminated, and an unrealized holding gain or loss on the held-to-maturity security is created for the same amount and included in other comprehensive income. This amount is amortized over the remaining life of the security as an adjustment of interest revenue by computing a new yield to maturity for that security.

Impairment occurs when a decline in value below the amortized cost of the debt security classified as available for sale or held to maturity is deemed to be other than temporary, and it is probable that an investor company will be unable to collect all amounts due. In such cases, the company writes down the amortized cost of the security to the fair value, and includes the amount of the write-down in net income as a realized loss. The fair value becomes the new "cost" and subsequent changes in fair value are accounted for as originally described.

**Equity Method of Accounting**

GAAP stipulates that an investor use the equity method to account for an investment in equity securities if the ownership allows the investor to exercise significant influence over the operating and financial policies of an investee.

**Strategy:** Generally speaking, the presumption is made that a company has significant influence if it owns 20% or more of the outstanding common stock of a company. In every case, however, the degree of influence in the investee company and not the percentage ownership is the determining factor. Therefore, there are times when a company may own more than 20% and not account for the investment using the equity method, and a company may own less than 20% and be required to use the equity method.

Under the equity method:

Investment = Acquisition Cost + Investor share of Investee income - Investor's share of Investee dividends

where,

Investor's Share of Investee Income = (Investee's Net Income x Ownership %) - Adjustments

and

Dividends received = Total dividends paid by Investee x Ownership %
Under the equity method, a company uses the following accounting procedures:

a. The investment in common stock is originally recorded at cost.

b. Dividends paid or declared are recorded as reductions in the carrying value of the investment account by preparing the following entry:

\[
\begin{align*}
\text{Cash} & \quad \text{XXX} \\
\text{Investment in Stock: Company B} & \quad \text{XXX}
\end{align*}
\]

c. A proportionate share (based on percentage ownership) of the investee's reported net income (loss) is recognized as income by the investor. If the investee has both ordinary and extraordinary income, the investor must also account for the income using two accounts. For example, if Company A owns 40% of Company B's common stock during all of 2011, and B Company reports 2011 ordinary income of $40,000 and extraordinary income of $10,000, the following journal entry would be made by Company A on December 31, 2011:

\[
\begin{align*}
\text{Investment in Stock: Company B} & \quad 20,000 \\
\text{Investment income: Ordinary (0.40 x $40,000)} & \quad 16,000 \\
\text{Investment income: Extraordinary (0.40 x $10,000)} & \quad 4,000
\end{align*}
\]

d. In addition, the investor company must make adjustments on its investment income in certain areas as follows:

(1) The effects on investor net income of any intercompany transactions between the investor and the investee are eliminated;

(2) When a company invests in another company the investee company usually has assets that it is depreciating. As we found out in Chapter 11, the book value of assets (cost - accumulated depreciation) is usually not equal to the fair value of the assets. Therefore, when a company invests in another they are paying fair value for the investment (and therefore the assets), but the investee is depreciating the items at a different value (book value). This means that an investee's net income uses depreciation expenses that are not based on the fair value. An investor must adjust for this fact by depreciating a proportionate share of the difference between the fair values and book values of the investee's depreciable assets. This additional depreciation is depreciated over the assets remaining useful life; and

(3) The investor must also account for their proportionate share of the investees' extraordinary items and results of discontinued operations in the same manner that the investee accounts for these items.

To help clarify item (2) above, let's continue the example we started in (c). Remember that Company A had purchased the 40% of Company B stock on January 1, 2011, with a purchase price of $220,000, and that the following information concerning Company B existed at the time of the acquisition:

<table>
<thead>
<tr>
<th>Depreciable Assets (remaining life = 10 years)</th>
<th>Balance Sheet Book Value</th>
<th>Fair Book Value</th>
<th>Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$500,000</td>
<td>$560,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chapter 15 Investments
On December 31, 2011, in addition to the entry in (c) above, Company A would make the following journal entry to record depreciation associated with the fair value of the assets acquired:

Investment income: Ordinary 2,400
Investment in Stock: Company B \[\frac{(0.40 \times 60,000)}{10}\] 2,400

The $60,000 used above comes from the difference between the fair value ($560,000) and the book value ($500,000) on the acquisition date.

If an investor acquires enough additional shares during a year to exercise significant influence over the investee, a change from the fair value method to the equity method is required. When the equity method is adopted, the investor restates its investment in the investee by debiting the Investment account and crediting Retained Earnings for its previous percentage of investee income (less dividends) for the period from the date of acquisition to the date it obtained significant influence. This restatement is a prior period (retroactive) adjustment. The company also eliminates any amounts included in the Allowance and Unrealized Increase/Decrease accounts that recorded these shares at fair value. Thereafter, the investor applies the equity method in the usual manner based on the current percentage ownership.

If the investor sells enough stock to justify switching from the equity method to the fair value method, the investor should apply the fair value method after the date of change. Previously recorded income remains as part of the Investment account.
Test Your Knowledge

1. During 2011, Pakenda Corporation began investing its idle cash in bonds. The information contained below relates to Pakenda's investment in available-for-sale securities for 2011 and 2012.

2011
April 1 Purchased $100,000 face value 12% bonds of the Altec Corporation at $107,721.71 plus accrued interest. The effective interest rate is 10%. Interest is payable on these bonds each July 31 and January 31. The effective interest method is used.

July 31 Received the semiannual interest on the Altec bonds.

Dec. 31 Recorded the accrued interest on the Altec bonds. On this date Altec bonds were selling at 103 plus accrued interest.

2012
Jan. 31 Received the semiannual interest on the Altec bonds.

March 1 Sold the Altec bonds at 104 plus accrued interest.

Record Pakenda's transactions in investments in available-for-sale securities for 2011 and 2012 using the fair value method.
2. The following information is available for Robbins Corporation's investment in available-for-sale securities.

<table>
<thead>
<tr>
<th></th>
<th>8/15/11 Cost</th>
<th>12/31/11 Fair Value</th>
<th>12/31/12 Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporation X Common 400 shares</td>
<td>$8,000</td>
<td>$10,000</td>
<td>$10,500</td>
</tr>
<tr>
<td>Corporation Y Common 600 shares</td>
<td>6,000</td>
<td>4,800</td>
<td>6,200</td>
</tr>
<tr>
<td>Corporation Z Common 800 shares</td>
<td>16,000</td>
<td>14,000</td>
<td>14,000</td>
</tr>
</tbody>
</table>

(a) Prepare the journal entry to record the initial acquisition and the necessary journal entries at the end of 2011 and 2012.

(b) In March 2013, Robbins sold the 600 shares of Corporation Y common stock for $5,900. Prepare the journal entry to record the sale.
3. During 2011 and 2012, the following events occurred:

(a) On January 1, 2011, Wilson Corporation acquired 3,000 of the 12,000 outstanding shares of Lowe Company common stock for $48 per share. The purchase price of the shares was equal to their book value.

(b) On June 30, 2011, Lowe Company paid a $3 per share dividend.

(c) On December 31, 2011, Lowe Company reported net income of $30,000. On this date the price of Lowe's common stock was $46 per share.

(d) On June 30, 2012, Lowe Company paid a $2 per share dividend.

(e) On December 31, 2012, Lowe Company reported net income of $26,000, and the market price per share was $47.

Prepare the journal entries to record the above events using the equity method.
4. On January 1, 2011, Jarrad Corporation acquired bonds with a face value of $300,000 for $274,848.47. The bonds have a 10% stated interest rate and a 12% yield rate. Interest is paid semiannually on June 30 and December 31, and the bonds mature on December 31, 2017. Jarrad has the intent and the ability to hold the bonds until maturity. Prepare the journal entries necessary to record the purchase of the bonds and the first two interest receipts using the effective interest method of amortization.
### Answers to Test Your Knowledge

1. **2011**

   **April 1**
   - Investment in Available for Sale Securities 107,721.71
   - Interest revenue ($100,000 x 12% x 2/12) 2,000.00
   - Cash 109,721.71

   **July 31**
   - Cash 6,000.00
   - Interest revenue ($107,721.71 x 10% x 6/12) 5,386.09
   - Investment in Available-for-Sale Securities 613.91

   **December 31**
   - Interest receivable 5,000.00
   - Interest revenue ($107,107.80 x 10% x 5/12) 4,462.83
   - Investment in Available-for-Sale Securities 537.17

   **December 31**
   - Unrealized Increase/Decrease in Value of Available-for-Sale 3,570.63
   - Allowance for change in value 3,570.63

   The allowance is calculated as follows:
   \[
   (107,721.71 - (613.91 + 537.17) - 103,000) \]

   **2012**

   **January 31**
   - Cash 6,000.00
   - Interest receivable 5,000.00
   - Interest revenue 892.57
   - Investment in Available-for-Sale Securities 107.43

   **March 1**
   - Cash 105,000.00
   - Loss on sale of Available for Sale Securities 2,350.38
   - Interest revenue 887.19
   - Investment in Available for Sale Securities 106,463.19

   - Allowance for change in value of investment 3,570.63
   - Unrealized Increase/Decrease in Value of AFS Securities 3,570.63
2. (a) 2011
August 15
Investment in Available-for-Sale Securities 30,000.00
Cash 30,000.00
To record initial acquisition.

December 31
Unrealized Increase/Decrease in Value of AFS Securities 1,200
Allowance for change in value of investment 1,200
To record an unrealized holding loss.

2012
December 31
Allowance for change in value of investment 1,900
Unrealized Increase/Decrease in Value of AFS Securities 1,900
To adjust the Allowance account to reflect a $700 cumulative unrealized increase in value.

(b) Cash 5,900
Loss on Sale of Available-for-Sale Securities 100
Investment in Available-for-Sale Securities 6,000
Unrealized Increase/Decrease in Value of AFS Securities 200
Allowance for change in value of investment 200
To record sale of securities.

3. (a) To record the acquisition of the stock:

Investment in Stock: Lowe Company 144,000
Cash 144,000

(b) To record the receipt of the $3 dividend per share in 2011:

Cash 9,000
Investment in Stock: Lowe Company 9,000

(c) To record Wilson Corporation's share in Lowe Company's reported net income in 2011:

Investment in Stock: Lowe Company (25% x $30,000) 7,500
Investment Income: Ordinary 7,500

(d) To record the receipt of the $2 dividend per share in 2012:

Cash 6,000
Investment in Stock: Lowe Company 6,000

(e) To record Wilson Corporation's share in Lowe Company's reported net income in 2012:

Investment in Stock: Lowe Company (25% x $26,000) 6,500
Investment Income: Ordinary 6,500
4. To record the bond purchase:

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in Debt Securities Held-to-Maturity</td>
<td>274,848.47</td>
</tr>
<tr>
<td>Cash</td>
<td>274,848.47</td>
</tr>
</tbody>
</table>

To record the receipt of interest on June 30, 2012:

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash ($300,000 x 0.10 x ½)</td>
<td>15,000.00</td>
</tr>
<tr>
<td>Investment in Debt Securities Held-to-Maturity</td>
<td>1,490.91</td>
</tr>
<tr>
<td>Interest Revenue ($274,848.47 x 0.12 x ½)</td>
<td>16,490.91</td>
</tr>
</tbody>
</table>

To record the receipt of interest on December 31, 2012:

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash ($300,000 x 0.10 x ½)</td>
<td>15,000.00</td>
</tr>
<tr>
<td>Investment in Debt Securities Held-to-Maturity</td>
<td>1,580.36</td>
</tr>
<tr>
<td>Interest Revenue [($274,848.47 + $1,490.91) x 0.12 x ½]</td>
<td>16,580.36</td>
</tr>
</tbody>
</table>