

# Brief Contents

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TAKEAWAY 2.2	Concept	Method	Assessment
	Is the trial balance in balance?	<p>Ending balances for all of the general ledger accounts entered on the trial balance.</p> <p>Total the debit column and the credit column on the trial balance.</p>	Verify the equality of the sum of the debit account balances and the sum of the credit account balances.

**YOUR TURN! 2.6**

The solution is on page 119.



Each of the following accounts from the Devin Company has a normal balance. The unadjusted balances are as of December 31, 2016, the end of Devin's first year of operations:

Cash . . . . .	1,500	Common stock . . . . .	7,500
Accounts receivable . . . . .	4,500	Sales revenue . . . . .	12,000
Inventory . . . . .	3,750	Salary expense . . . . .	4,500
Property, plant, and equipment . . . . .	11,250	Administrative expenses . . . . .	750
Accounts payable . . . . .	2,250	Dividends . . . . .	1,500
Notes payable . . . . .	6,000		

Prepare an unadjusted trial balance for the Devin Company as of December 31, 2016.

**FORENSIC ACCOUNTING****Fraudulent Reporting**

Verifying that the sum of the debit account balances from the general ledger is equal to the sum of the credit account balances is not sufficient to guarantee accuracy of financial records. The infamous accounting scandal at **WorldCom** provides a case in point. To inflate its net income, WorldCom improperly “capitalized expenses”—that is, they inappropriately debited property, plant, and equipment, an asset account, when they should have debited an expense account. While the sum of the debit account balances on WorldCom's books did equal the sum of the credit account balances, assets were overstated and expenses were understated by almost \$7 billion. WorldCom's CEO Bernard Ebbers, the mastermind of this fraudulent accounting scheme, was convicted of conspiracy to commit fraud, securities fraud, and making false filings with the SEC. Mr. Ebbers was sentenced to 25 years in prison.

**COMPREHENSIVE PROBLEM**

Juan Rios acted upon his entrepreneurial spirit and started a graphic design business called Juan's Designs. Based on an excellent business plan, Juan was able to raise sufficient capital to begin operations in October 2016. During the month of October, the following events occurred related to the business.

1. Stockholders invested \$40,000 cash in the business in exchange for common stock.
2. Paid \$2,500 cash for rent on an office suite for the month of October.
3. Purchased two desktop computers, software, and a printer for \$10,000 cash.
4. Purchased miscellaneous supplies for \$500 ~~cash~~ that will be used during the month, all on account.
5. Purchased an advertisement in a local newspaper for \$300 cash, announcing the opening of his new business.
6. Performed \$5,500 of design work on account.
7. Received \$3,500 cash from customers for design work previously completed.
8. Paid \$350 cash toward the company's accounts payable balance.
9. Paid \$2,500 cash for wages of Juan Rios.

	Account	Beginning Balance	Ending Balance	Other Information
a.	Cash . . . . .	\$ 8,100	\$ 5,250	Total cash disbursed, \$6,100.
b.	Accounts receivable . . . .	10,500	8,900	Services on account, \$17,000.
c.	Notes payable . . . . .	17,000	18,500	Borrowed funds by issuing a note, \$33,000.
d.	Accounts payable . . . . .	5,280	1,750	Payments on account, \$4,000.
e.	Stockholders' equity . . . .	34,000	41,000	Capital contribution, \$6,100.

Unknown Amounts Required		
a.	Total cash received . . . . .	\$3,250
b.	Total cash collected from credit customers . . . . .	_____
c.	Notes payable repaid during the period . . . . .	_____
d.	Goods and services received from suppliers on account . . . . .	_____
e.	Net income, assuming that no dividends were paid . . . . .	_____

**E2-4B. Transaction Analysis** The accounts below are from the general ledger of Andrew Miller & Company, an architectural firm. For each letter given in the T-accounts, describe the type of business transaction(s) or event(s) that would most likely be reflected by entries on that side of the account. For example, the answer to (a) is amounts for services performed for clients on account.

LO2, 5

<b>Accounts Receivable</b>		<b>Unearned Revenue</b>	
(a)			(c)
<b>Supplies</b>		<b>Accounts Payable</b>	
(d)			(f)
<b>Service Fees Earned</b>		<b>Dividends</b>	
			(h)
<b>Common Stock</b>		<b>Utilities Expense</b>	
			(j)
	(i)		

**E2-5B. Transaction Analysis** Match each of the following transactions of Ardon Peralta & Company, a landscape design firm, with the appropriate letters, indicating the debits and credits to be made. The key for the letters follows the list of transactions. The correct answer for Transaction 1 is given as an illustration:

LO4

	Answer
1. Purchased supplies on account.	<u>a, d</u>
2. Paid interest on a bank loan.	_____
3. The business paid the stockholders a dividend.	_____
4. Returned some defective supplies and received a reduction in the amount owed.	_____
5. Made payment to repay bank loan.	_____
6. Received an invoice for supplies used.	_____
7. Received payment in advance from client for work to be done next month.	_____
8. Paid employee's salary.	_____
9. Peralta contributed additional capital to the business.	_____

#### Financial Effect of Transaction

a. Debit an asset	g. Debit dividends
b. Credit an asset	h. Credit dividends
c. Debit a liability	i. Debit a revenue
d. Credit a liability	j. Credit a revenue
e. Debit common stock	k. Debit an expense
f. Credit common stock	l. Credit an expense

Prepare journal entries for Sawyer Enterprises for each of the following accrual accounting adjustments on June 30.

1. Sawyer Enterprises sells \$600 of merchandise to Apollo Inc. with terms of cash due in 30 days.
2. Apollo Inc. prepays Sawyer Enterprises \$700 for merchandise that will be delivered in 30 days.
3. Sawyer Enterprises purchases and receives inventory of \$400 from its supplier Adamo Co. The terms are cash due in 45 days.

### YOUR TURN! 3.1

The solution is on page 184.



## ADJUSTING ACCOUNTS

In Chapter 2, we analyzed a series of accounting transactions for WebWork, Inc., that occurred during the month of December. We prepared journal entries for those transactions and recorded them in the general journal. We then posted the company's journal entry data to the general ledger, which we set up in T-account form. Many of the general ledger account balances from Chapter 2, however, require an end-of-period adjustment to bring them to the correct balance for the preparation of WebWork's financial statements. For example, WebWork prepaid six months of rent for its office space on December 1. By December 31, one month's rent has expired. The prepaid rent account must be adjusted so that the account balance reflects the remaining amount of rent that is still prepaid and rent expense is recognized for the month of December. When it is time to prepare a company's financial statements, the company must review account balances and make any necessary end-of-period adjustments to bring those (unadjusted) accounts to their proper balance.

### LO2

Describe the adjusting process.

### Unadjusted Trial Balance

The end-of-period adjustment process begins with the preparation of a trial balance of all general ledger accounts. Because this trial balance reports the account balances before any adjustments have been made, it is referred to as the **unadjusted trial balance**. An unadjusted trial balance is prepared to insure that the general ledger is in balance before the end-of-period adjusting process begins. Accumulating all general ledger account balances in one location makes it easier to review the accounts and determine which account balances must be adjusted. The unadjusted trial balance of WebWork, Inc., as of December 31 is in **Exhibit 3-1**.

**Exhibit 3-1** Unadjusted Trial Balance for WebWork, Inc.

WEBWORK, INC. Unadjusted Trial Balance December 31, 2016		
	Debit	Credit
Cash . . . . .	\$40,590	
Accounts receivable . . . . .	1,340	
Office supplies . . . . .	2,850	
Prepaid rent . . . . .	10,800	
Office equipment . . . . .	32,400	
Accounts payable . . . . .		\$ 2,850
Unearned revenue . . . . .		3,000
Notes payable . . . . .		36,000
Common stock . . . . .		30,000
Dividends . . . . .	500	
Fee revenue . . . . .		18,250
Wage expense . . . . .	1,620	
Totals . . . . .	<u>\$90,100</u>	<u>\$90,100</u>



**Solution**

a.	June 30	Insurance expense	1,500	
		Prepaid insurance		1,500
		<i>To record 6 months' insurance expense.</i> <i>(\$6,000/4 = \$1,500).</i>		
	30	Supplies expense	25,000	
		Supplies		25,000
		<i>To record supplies expense for the year.</i> <i>(\$31,300 – \$6,300 = \$25,000).</i>		
	30	Depreciation expense—Laboratory equipment	30,000	
		Accumulated depreciation—Laboratory equipment		30,000
		<i>To record depreciation for the year.</i> <i>(\$270,000/9 years = \$30,000).</i>		
	30	Diagnostic fees received in advance	3,000	
		Diagnostic fees revenue		3,000
		<i>To record portion of advance payment that has been earned.</i> <i>(\$4,000 × 3/4 = \$3,000).</i>		
	30	Wage expense	600	
		Wages payable		600
		<i>To record unpaid wages at June 30.</i>		
	30	Rent expense	2,000	
		Rent payable		2,000
		<i>To record rent expense for June.</i>		

b.

<b>Balke Laboratory</b> <b>Adjusted Trial Balance</b> <b>June 30, 2016</b>						
	Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance	
	Debit	Credit	Debit	Credit	Debit	Credit
Cash .....	\$ 1,000				\$ 1,000	
Accounts receivable .....	9,200				9,200	
Prepaid insurance .....	6,000		1	\$ 1,500	4,500	
Supplies .....	31,300		2	25,000	6,300	
Laboratory equipment .....	270,000				270,000	
Accumulated depreciation— Laboratory equipment .....		\$ 30,000	3	30,000		\$ 60,000
Accounts payable .....		3,100				3,100
Wages payable .....			5	600		600
Rent payable .....			6	2,000		2,000
Diagnostic fees received in advance .....		4,000	4	\$ 3,000		1,000
Common stock .....		90,000				90,000
Retained earnings .....		50,000				50,000
Diagnostic fees revenue .....		220,400		4	3,000	223,400
Wage expense .....	58,000		5	600	58,600	
Rent expense .....	22,000		6	2,000	24,000	
Insurance expense .....			1	1,500		1,500
Supplies expense .....			2	25,000		25,000
Depreciation expense— Laboratory equipment .....			3	30,000		30,000
Totals .....	<u>\$397,500</u>	<u>\$397,500</u>	<u>\$62,100</u>	<u>\$62,100</u>	<u>\$430,100</u>	<u>\$430,100</u>

**LO8** **SE3-12. The Accounting Worksheet** The adjusted trial balance section of Menlo Company's worksheet shows a \$1,500 debit balance in utility expense. At the end of the accounting period the accounting manager accrues an additional \$300 of utility expense for the last week of the period. This will result in the following amounts appearing on Menlo's worksheet for utilities expense:

(Appendix 3B)



- \$300 debit adjustment; \$1,800 debit adjusted trial balance; \$1,800 debit balance sheet
- \$300 debit adjustment; \$1,800 debit adjusted trial balance; \$1,800 debit income statement
- \$300 credit adjustment; \$1,200 debit adjusted trial balance; \$1,800 debit income statement
- \$300 credit adjustment; \$1,800 debit adjusted trial balance; \$1,800 debit income statement

## EXERCISES—SET A

**LO4** **E3-1A. Transaction Entries and Adjusting Entries** Deluxe Building Services offers janitorial services on both a contract basis and an hourly basis. On January 1, Deluxe collected \$30,000 in advance on a six-month contract for work to be performed evenly during the next six months.



- Provide the general journal entry on January 1 to record the receipt of \$30,000 for contract work.
- Provide the adjusting entry to be made on January 31, for the contract work done during January.
- At January 31, a total of 35 hours of hourly rate janitor work was unbilled. The billing rate is \$25 per hour. Provide the adjusting entry needed on January 31. (Note: The firm uses the account Fees Receivable to reflect amounts due but not yet billed.)

**LO3, 4** **E3-2A. Adjusting Entries** Selected accounts of Ideal Properties Inc., a real estate management firm, are shown below as of January 31, before any adjusting entries have been made:



	Debit	Credit
Prepaid insurance .....	\$6,840	
Supplies .....	2,100	
Office equipment .....	6,240	
Unearned rent revenue .....		\$ 5,550
Salaries expense .....	3,250	
Rent revenue .....		16,000

Monthly financial statements are prepared. Using the following information, record in a general journal the adjusting entries necessary on January 31:

- Prepaid Insurance represents a three-year premium paid on January 1.
- Supplies of \$975 were on hand January 31.
- Office equipment is expected to last eight years. Depreciation is recorded monthly.
- On January 1, the firm collected six months' rent in advance from a tenant renting space for \$925 per month.
- Accrued salaries not recorded as of January 31 are \$510.

**LO3, 4** **E3-3A. Adjusting Entries** For each of the following unrelated situations, prepare the necessary adjusting entry in general journal form:



- Unrecorded depreciation on equipment is \$750.
- The Supplies account has a balance of \$3,100. Supplies on hand at the end of the period totaled \$1,200.
- On the date for preparing financial statements, an estimated utilities expense of \$425 has been incurred, but no utility bill has been received.
- On the first day of the current month, rent for four months was paid and recorded as a \$2,800 debit to Prepaid Rent and a \$2,800 credit to Cash. Monthly statements are now being prepared.
- Nine months ago, Solid Insurance Company sold a one-year policy to a customer and recorded the receipt of the premium by debiting Cash for \$624 and crediting Unearned Premium Revenue for \$624. No adjusting entries have been prepared during the nine-month period. Annual financial statements are now being prepared.
- At the end of the accounting period, employee wages of \$1,050 have been incurred but not paid.
- At the end of the accounting period, \$350 of interest has been earned but not yet received on notes receivable that are held.

Rent Expense; Supplies Expense; Insurance Expense; Delivery Van Expense; Depreciation Expense—Delivery Van; and Depreciation Expense—Equipment.

- b. Record July transactions in the general journal and post to the ledger accounts.
- c. Prepare an unadjusted trial balance as of July 31.
- d. Record adjusting journal entries in the general journal and post to the ledger accounts. The following information is available on July 31:

Supplies on hand, \$1,600  
 Accrued wages, \$525  
 Estimated life of delivery van, three years  
 Estimated life of equipment, six years

Also, make any necessary adjusting entries for insurance, rent, and catering fees indicated by the July transactions.

**LO3, 4**
**P3-3A.**

**Trial Balance and Adjusting Entries** Photomake, Inc., a commercial photography studio, has just completed its first full year of operations on December 31. The general ledger account balances before year-end adjustments follow. No adjusting entries have been made to the accounts at any time during the year. Assume that all balances are normal.

Cash . . . . .	\$ 2,150	Accounts payable . . . . .	\$ 1,710
Accounts receivable . . . . .	3,600	Unearned photography fees . . . . .	2,600
Prepaid rent . . . . .	12,600	Common stock . . . . .	24,000
Prepaid insurance . . . . .	2,970	Photography fees earned . . . . .	34,480
Supplies . . . . .	4,250	Wages expense . . . . .	11,000
Equipment . . . . .	22,800	Utilities expense . . . . .	3,420

An analysis of the firm's records discloses the following items:

1. Photography services of \$1,450 have been rendered, but customers have not yet been billed. The firm uses the account Fees Receivable to reflect amounts due but not yet billed.
2. The equipment, purchased January 1, has an estimated life of 10 years.
3. Utilities expense for December is estimated to be \$650, but the bill will not arrive until January of next year.
4. The balance in Prepaid Rent represents the amount paid on January 1, for a two-year lease on the studio.
5. In November, customers paid **\$2,600** in advance for pictures to be taken for the holiday season. When received, these fees were credited to Unearned Photography Fees. By December 31, all fees are earned.
6. A three-year insurance premium paid on January 1, was debited to Prepaid Insurance.
7. Supplies on hand at December 31 are \$1,750.
8. At December 31, wages expense of \$500 has been incurred but not paid.

**Required**

- a. Prove that the sum of the debits equals the sum of the credits for Photomake's unadjusted account balances by preparing an unadjusted trial balance as of December 31.
- b. Record adjusting entries in the general journal.

**LO3, 4**
**P3-4A.**

**Adjusting Entries** Dole Carpet Cleaners ended its first month of operations on June 30. Monthly financial statements will be prepared. The unadjusted account balances are as follows:

DOLE CARPET CLEANERS Unadjusted Trial Balance June 30, 2015		
	Debit	Credit
Cash . . . . .	\$ 1,180	
Accounts receivable . . . . .	450	
Prepaid rent . . . . .	3,100	
Supplies . . . . .	2,520	
Equipment . . . . .	4,440	
Accounts payable . . . . .		\$ 760
Common stock . . . . .		2,500
Retained earnings . . . . .		5,000
Dividends . . . . .	200	
Service fees earned . . . . .		4,650
Wages expense . . . . .	1,020	
	<u>\$12,910</u>	<u>\$12,910</u>

The following information is also available:

1. The balance in Prepaid Rent was the amount paid on June 1 for the first two months' rent.
2. Supplies on hand at June 30 were \$950.
3. The equipment, purchased June 1, has an estimated life of five years.
4. Unpaid wages at June 30 were \$450.
5. Utility services used during June were estimated at \$650. A bill is expected early in July.
6. Fees earned for services performed but not yet billed on June 30 were \$380. The firm uses the account Fees Receivable to reflect amounts due but not yet billed.

#### Required

Prepare the adjusting entries needed at June 30 for the general journal.

**P3-5A. Adjusting Entries** The following information relates to December 31 adjustments for Finest Print, a printing company. The firm's fiscal year ends on December 31.

**LO3, 4**



1. Weekly salaries for a five-day week total \$2,520, payable on Fridays. December 31 of the current year is a Tuesday.
2. Finest Print has \$25,000 of notes payable outstanding at December 31. Interest of \$250 has accrued on these notes by December 31, but will not be paid until the notes mature next year.
3. During December, Finest Print provided \$1,000 of printing services to clients who will be billed on January 2. The firm uses the account Fees Receivable to reflect amounts due but not yet billed.
4. Starting December 1, all maintenance work on Finest Print's equipment is handled by Prompt Repair Company under an agreement whereby Finest Print pays a fixed monthly charge of \$125. Finest Print paid six months' service charge in advance on December 1, debiting Prepaid Maintenance for \$750.
5. The firm paid \$900 on December 15 for a series of radio commercials to run during December and January. One-third of the commercials have aired by December 31. The \$900 payment was debited to Prepaid Advertising.
6. Starting December 16, Finest Print rented 400 square feet of storage space from a neighboring business. The monthly rent of \$0.80 per square foot is due in advance on the first of each month. Nothing was paid in December, however, because the neighbor agreed to add the rent for one-half of December to the January 1 payment.
7. Finest Print invested \$7,500 in securities on December 1 and earned interest of \$62 on these securities by December 31. No interest will be received until January.
8. The annual depreciation on the firm's equipment is \$2,425. No depreciation has been recorded during the year.

#### Required

Prepare the required December 31 adjusting entries in the general journal.

MICROSOFT CORPORATION			
Balance Sheet			
June 30, 2014 (in millions)			
<b>Assets</b>			
Current assets			
Cash	\$	8,669	
Accounts receivable		21,485	
Inventory		2,660	
Other current assets		81,432	
Total current assets			\$114,246
Property, plant, and equipment			13,011
Intangible assets			27,108
Other long-term assets			18,019
Total assets			<u>\$172,384</u>
<b>Liabilities and Stockholders' Equity</b>			
Current liabilities			
Accounts payable	\$	13,569	
Other current liabilities		32,056	
Total current liabilities			\$45,625
Long-term liabilities			36,975
Total liabilities			82,600
Stockholders' equity			
Common stock		68,366	
Retained earnings		17,710	
Other stockholders' equity		3,708	
Total stockholders' equity			89,784
Total liabilities and stockholders' equity			<u>\$172,384</u>

MICROSOFT CORPORATION	
Statement of Cash Flows	
For Year Ended June 30, 2014 (in millions)	
Cash flow provided by operating activities	\$32,231
Cash flow used by investing activities	(18,833)
Cash flow used by financing activities	(8,533)
Net increase in cash	4,865
Cash at June 30, 2013	3,804
Cash at June 30, 2014	<u>\$ 8,669</u>

b.

Current ratio	$\frac{\$114,246}{\$45,625} = 2.50 : 1$
Debt-to-total-assets ratio	$\frac{\$82,600}{\$172,384} = 47.9\%$
Return on sales ratio	$\frac{\$22,074}{\$86,833} = 25.4\%$

### SHORT EXERCISES



- LO1 SE5-1. Merchandising versus Service Firm** For each of the following accounts, indicate whether it would be found in the records of a merchandising firm, a service firm, or both.

- Cost of goods sold.
- Service revenue.
- Purchase returns and allowances.
- Inventory.
- Accounts receivable.
- Accounts payable.
- Sales revenue.
- Freight-out.



- LO2 SE5-2. Accounting for Purchase Transactions** Debra Company began operations on June 1. The following transactions took place in June:

- Purchases of merchandise on account were \$600,000.
- The cost of freight to receive the inventory was \$20,000. This was paid in cash.
- Debra returned \$10,000 of the merchandise due to an ordering error. Debra received a full credit for the return.
- Debra paid the remaining balance for the merchandise.

Calculate the dollar amount that Debra will have in inventory at the end of the month. Assume Debra uses the perpetual inventory system and there were no sales.



- LO2 SE5-3. Accounting for Purchase Transactions** Use the data from SE5-2 and prepare the journal entries to record the June transactions.



- LO2 SE5-4. Accounting for Purchase Discounts** Ken Company purchased \$5,000 of merchandise from Marilyn Company with terms of 3/10 n/45. What percent discount will Ken Company get if it pays within the allowed discount period? If Ken Company fails to pay within the discount period, how many days does Ken Company have from the date of purchase before the payment is considered to be late?



- LO2 SE5-5. Accounting for Purchase Discounts** Using the information in SE5-4, what amount will Ken Company pay to Marilyn Company if Ken Company takes advantage of the purchase discount?



- LO3 SE5-6. Accounting for Sales Transactions** Kate Company uses the perpetual inventory system. Record the journal entries for the following transactions:

- On July 16, Kate sold \$600 of merchandise with terms of 2/10 n/30. The cost of the merchandise was \$360.
- On July 19, the customer returned \$100 of the merchandise from (a). The cost of the merchandise was \$60.
- On July 22, the customer paid the entire balance due to Kate.



- LO4 SE5-7. Gross Profit Percentage** Using the data below, compute Dino's gross profit percentage for the month of January.

Net sales .....	\$10,000
Cost of goods sold .....	4,000
Operating expenses .....	3,000
Other income .....	500
Income tax expense .....	1,200



- LO4 SE5-8. Return on Sales Ratio** Using the data in **SE5-7**, compute Dino's return on sales ratio for the month of January.



(Appendix 5A)

- LO5 SE5-9. Cost of Goods Sold and the Periodic System** Kanzu Company uses the periodic inventory system. Kanzu started the period with \$10,000 in inventory. The Company purchased an additional \$25,000 of merchandise, and returned \$1,000 for a full credit. A physical count of inventory at the end of the period revealed that there was an ending inventory balance of \$8,000. What was Kanzu's cost of goods sold during the period?

- LO2 E5-5B. Recording Purchases—Perpetual System** On September 12, Evans, Inc., purchased merchandise for \$4,500, with terms of 2/10, n/30. On September 16, the firm returned \$500 of the merchandise to the seller. Payment of the account occurred on September 19. Evans uses the perpetual inventory system.

**Required**

- Prepare the journal entries for September 12, September 16, and September 19.
- Assuming that the account was paid on September 25, prepare the journal entry for payment on that date.

- LO4 E5-6B. Profitability Analysis** Alex Enterprises reports the following information on its year-end income statement:

Net sales. . . . .	\$190,000	Operating expenses. . . . .	\$20,000
Cost of goods sold. . . . .	130,000	Other income. . . . .	10,000

**Required**

Calculate Alex's gross profit percentage and return on sales ratio.

- LO5 E5-7B. Journal Entries for Sale, Return, and Remittance—Periodic System** On March 10, the Sharon Company sold merchandise listing for \$2,500 to the Dillard Company with terms of 2/10, n/30. On March 14, \$100 of merchandise was returned because it was the wrong size. On March 20, Sharon Company received a check for the amount due.

**Required**

Prepare the journal entries made by Sharon Company for these transactions. Sharon uses the periodic inventory system.

- LO5 E5-8B. Journal Entries for Purchase, Return, and Remittance—Periodic System** On August 15, the Harris Company purchased \$16,500 of merchandise from Jason Company with terms of 2/10, n/30. On August 17, Harris paid \$350 freight on the shipment. On August 20, Harris returned \$500 worth of the merchandise for credit. Final payment was made to Jason on August 24. Harris Company records purchases using the periodic inventory system.

**Required**

Prepare the journal entries that Harris should make on August 15, August 17, August 20, and August 24.

- LO5 E5-9B. Journal Entries for Merchandise Transactions on Seller's and Buyer's Books—Periodic System** The following are selected transactions of Fenton, Inc., during the month of January:

- Jan. 20 Sold and shipped on account to Lawrence Stores merchandise listing for \$2,500 with terms of 2/10, n/30.  
 27 Lawrence Stores was granted a \$700 allowance on goods shipped January 20.  
 29 Received from Lawrence Stores a check for full settlement of the January 20 transaction.

**Required**

Prepare journal entries for (a) Fenton, Inc., and (b) Lawrence Stores. Both companies use the periodic inventory system.

- LO6 E5-10B. New Revenue Recognition Standard—Adjusting Journal Entries** PrimeTech sold \$2,000,000 of merchandise on account during the current year. The cost for this merchandise to PrimeTech was \$600,000. To encourage early payment from its customers, PrimeTech offers credit terms of 2/10, n/30. At year-end, PrimeTech recognizes that there are \$200,000 of sales on account still eligible for the 2 percent discount. PrimeTech believes that all customers will pay within the discount period to receive this discount. In addition, PrimeTech allows a 60-day return privilege for the merchandise it sells. At year-end, PrimeTech estimates there remain \$450,000 of sales (with a cost to PrimeTech of \$135,000) that are still within the 60-day return period and that, based on past experience, 7 percent of this merchandise is expected to be returned. Prepare the period-end adjusting journal entries needed for PrimeTech to comply with the new revenue recognition standard. Assume PrimeTech's fiscal year-end is December 31.

- LO6 E5-11B. New Revenue Recognition Standard—Adjusting Journal Entries** During the year, Butler Corporation sells merchandise on account totaling \$5,000,000 with a cost of merchandise to Butler of \$2,000,000. Butler offers its customers credit terms of 1/15, n/30. Butler recognizes that there are



COSTCO WHOLESALE CORPORATION		
(in millions)	2014	2013
Net sales. . . . .	\$110,212	\$102,870
Cost of goods sold. . . . .	98,458	91,948
Net income. . . . .	2,058	2,039

**Required**

Evaluate Costco's performance in terms of gross profit percentage and return on sales ratio. How does Costco compare to **Target** and **Walmart**? (See **Exhibits 5-5** and **5-6** on pages 245 and 246.)

## ANSWERS TO SELF-STUDY QUESTIONS:

1. c, (pp. 237–241) 2. c, (pp. 237–241) 3. c, (pp. 238–241) 4. c, (pp. 245–247) 5. c, (pp. 239–241)  
 6. d, (pp. 239–241) 7. **a**, (pp. 245–247) 8. **c**, (p. 246) 9. b, (p. 236) 10. c, (p. 249)  
 11. b, (pp. 250–251)

## YOUR TURN! SOLUTIONS

**Solution 5.1**

b) is false. The sum of beginning inventory plus the cost of goods purchased is equal to the cost of goods available for sale. This would be equal to the cost of goods sold only if all available inventory was sold.

**Solution 5.2**

June 1	Inventory	510.00	
	Accounts payable		510.00
	<i>To record merchandise purchased on account (125 CDs @ \$4.08 each)</i>		
June 1	Inventory	22.18	
	Cash		22.18
	<i>To record payment of freight charges on merchandise purchased.</i>		
June 4	Accounts payable	61.20	
	Inventory		61.20
	<i>To record the return of defective merchandise (15 units @ \$4.08 per unit).</i>		
June 8	Accounts payable	448.80	
	Cash		439.82
	Inventory		8.98
	<i>To record full payment within discount period. Cash discount earned = \$8.98.</i>		

**Solution 5.3**

June 15	Accounts receivable	750.00	
	Sales revenue		750.00
	<i>To record the sale of 75 CDs on account.</i>		
June 15	Cost of goods sold	315.00	
	Inventory		315.00
	<i>To record cost of goods sold for 75 CDs.</i>		
June 20	Sales returns and allowances	50.00	
	Accounts receivable		50.00
	<i>To record the return of 5 CDs for credit.</i>		



**Solution 6.3**

	Cost of Goods Sold	Beginning Inventory	Purchases	Ending Inventory
2015	\$7,000 (instead of \$7,500) . . . . .	\$ — +	\$10,000 —	\$3,000
2016	\$13,000 (instead of \$12,500) . . . . .	\$ 3,000 +	\$15,000 —	\$5,000

	Without Error	With Error
2015		
Sales . . . . .	\$15,000	\$15,000
Cost of goods sold . . . . .	<u>7,000</u>	<u>7,500</u>
Net income . . . . .	<u>\$ 8,000</u>	<u>\$ 7,500</u>
2016		
Sales . . . . .	\$25,000	\$25,000
Cost of goods sold . . . . .	<u>13,000</u>	<u>12,500</u>
Net income . . . . .	<u>\$12,000</u>	<u>\$12,500</u>

**Solution 6.4**

The lowest value for each inventory item is: DSLR \$110,000, Point and Shoot \$73,000, and Camcorders \$48,000. The total of the inventory is therefore valued under LCM at \$231,000 (\$110,000 + \$73,000 + \$48,000).

**Solution 6.5**

	2015	2016
Inventory turnover . . . . .	$\frac{\$2,000,000}{(\$450,000 + \$430,000)/2} = 4.55$	$\frac{\$2,300,000}{(\$430,000 + \$320,000)/2} = 6.13$
Days' sales in inventory . . . . .	$365/4.55 = 80.22$ days	$365/6.13 = 59.54$ days

The company increased its sales by \$400,000 from 2015 to 2016, and at the same time, decreased its average inventory by \$65,000 (\$440,000 – \$375,000) as a consequence of improved inventory management. This resulted in a significantly improved inventory turnover (6.13 versus 4.55) and 20.68 (80.22 – 59.54) less days' sales in inventory. It appears that the new inventory management system is a financial success.

**Solution 6A.1**

FIFO							Inventory Balance		
Date	Units	Purchased Unit Cost	Total	Units	Sold Unit Cost	Total	Units	Unit Cost	Total
Jan. 1 . . . .							1,000	\$5.00	\$5,000
Jan. 5 . . . .	600	\$6.00	\$3,600				1,000	5.00	8,600
							600	6.00	
Jan. 15 . . .				200	\$5.00	\$1,000	800	5.00	7,600
							600	6.00	
Jan. 17 . . .	300	7.00	2,100				800	5.00	9,700
							600	6.00	
							300	7.00	
Jan. 25 . . .				400	5.00	2,000	400	5.00	7,700
							600	6.00	
							300	7.00	
						<u>\$3,000</u>			

## Operational Audits

Both internal audit departments and independent audit firms perform operational audits. An **operational audit** is an evaluation of activities, systems, and internal controls within a company to determine their efficiency, effectiveness, and economy. Operational auditing goes beyond accounting records and financial statements to obtain a full understanding of the operations of a company. Companies dedicated to continuous quality improvement often use operational audits to identify specific areas where they need to improve the quality of their operations or products.

Auditors design operational audits to assess the quality and efficiency of operational performance, identify opportunities for improvement, and develop specific recommendations for improvement. The scope of an operational audit can be very narrow, such as a review and evaluation of the procedures for processing cash receipts, or quite broad, such as a review and evaluation of all of the internal controls in a computerized accounting system.

Match the description in the left-hand column with the type of audit in the right-hand column:

- |   |                              |
|---|------------------------------|
| 1. Conducted by company employees   | a. Internal audit            |
| 2. Conducted by independent auditors  | b. Financial statement audit |
| 3. Conducted by both independent auditors and internal auditors                     | c. Operational audit         |
| 4. Primary purpose is to report on the fairness of a company's financial statements |                              |
| 5. Evaluation of the efficiency and effectiveness of company activities             |                              |

**YOUR  
TURN!  
7A.1**

The solution is on page 378.

## SUMMARY OF LEARNING OBJECTIVES

### Define the three elements of fraud. (p. 332)

LO1

- The fraud triangle consists of three parts: (1) pressure, (2) rationalization, and (3) opportunity.

### Discuss how the COSO framework helps prevent fraud, identify potential internal control failures, and discuss SOX regulations. (p. 333)

LO2

- The COSO framework identifies five internal control components; (1) the control environment; (2) risk assessment; (3) control activities; (4) information and communication; and (5) monitoring activities.
- Internal controls are the measures undertaken by a company to ensure the reliability of its accounting data, protect its assets from theft or unauthorized use, ensure that employees follow the company's policies and procedures, and evaluate the performance of employees, departments, divisions, and the company as a whole.
- A prevention control is designed to deter problems before they arise. A detection control is designed to discover problems soon after they arise. Prevention controls are generally more desirable than detection controls.
- A company should incorporate the following concepts when it designs its internal control:
  - Establish clear lines of authority and responsibility.
  - Implement segregation of duties.
  - Hire competent personnel.
  - Use control numbers on all business documents.
  - Develop plans and budgets.
  - Maintain adequate accounting records.
  - Provide physical and electronic controls.
- The internal control system must be monitored in order to assess the quality of the system's performance over time. One type of monitoring activity is an internal audit.
- Occasionally, internal controls fail. To compensate, many businesses purchase a fidelity bond, an insurance policy that provides financial compensation for theft by employees specifically covered by the insurance.
- For public companies, strong internal controls are required by law. The Sarbanes-Oxley Act (SOX) mandates that all publicly traded U.S. corporations maintain an adequate system of internal controls, that top management ensures the reliability of these controls, and that outside independent auditors attest to the adequacy of the controls. Failing to do so can result in prison sentences of up to 20 years and/or monetary fines of up to \$5 million.

A list of deposits made and checks written during September is shown below:

Deposits Made			Checks Written		
Sept.	1 .....	\$1,120	No. 607 .....	\$1,850	
	4 .....	850	608 .....	1,100	
	8 .....	744	609 .....	552	
	12 .....	585	610 .....	640	
	16 .....	1,540	611 .....	488	
	24 .....	1,028	612 .....	851	
	29 .....	680	613 .....	310	
	30 .....	1,266	614 .....	920	
		<u>\$7,813</u>	615 .....	386	
			616 .....	420	
				<u>\$7,517</u>	

The Cash in Bank account balance on September 30 was \$14,406. In reviewing checks returned by the bank, the accountant discovered that check No. 612, written for \$815 for advertising expense, was recorded in the cash disbursements journal as \$851. The NSF check for \$973, which Winton deposited on September 24, was a payment on account from customer D. Walker.

#### Required

- Prepare a bank reconciliation for Winton, Inc., at September 30.
- Prepare the necessary journal entries to bring the Cash in Bank account into agreement with the reconciled cash balance on the bank reconciliation.

### LO3 P7-6A. Reporting Cash

Fey Company has the following items at year-end.

Currency and coin in safe .....	\$ 4,100
Funds in savings account (requires \$2,300 compensating balance) .....	26,540
Funds in checking account .....	6,750
Traveler's checks .....	625
Postdated check .....	1,250
Not-sufficient-funds check .....	880
Money market fund .....	32,400

#### Required

Identify the amount of the above items that should be reported as cash and cash equivalents on Fey Company's balance sheet.

### LO2 P7-7A. Internal Control

Bart Simons has worked for Dr. Homer Spring for many years. Bart has been a model employee. He has not taken a vacation in over four years, always stating that work was too important. One of Bart's primary jobs at the clinic is to open mail and list the checks received. He also collects cash from patients at the cashier's window as patients leave. There are times that things are so hectic that Bart does not bother to give the patient a receipt; however, he assures them that he will make sure their account is properly credited. When things slow down at the clinic Bart often offers to help Lisa post payments to the patients' accounts receivable ledger. Lisa is always happy to receive help since she is also quite busy and because Bart is such a careful worker.

#### Required

Identify any internal control principles that may be violated in Dr. Spring's clinic.

### LO2, 4 P7-8A. Internal Control

Listed below are (a) four potential errors or problems that could occur in the processing of cash transactions and (b) internal control principles. Review each error or problem and identify an internal control principle that could reduce the chance of the error or problem occurring. You may also cite more than one principle if more than one applies, or write none if none of the principles will correct the error or problem.

- An employee steals cash collected from a customer's accounts receivable and hides the theft by issuing a credit memorandum indicating the customer returned the merchandise.

1. Deposits in transit on June 30 total \$2,550.
2. The bank statement shows a debit memorandum for a \$10 check printing charge.
3. Check No. 160 payable to Simon Company was recorded in the accounting records for \$124 and cleared the bank for this same amount. A review of the records indicated that the Simon account now has an \$18 credit balance and the check to them should have been \$142.
4. Outstanding checks as of June 30 totaled \$3,100.
5. Check No. 176 was correctly written and paid by the bank for \$203. The check was recorded in the accounting records as a debit to accounts payable and a credit to cash for \$230.
6. The bank returned a NSF check in the amount of \$311.
7. The bank included a credit memorandum for \$630 representing a collection of a customer's note. The principal portion was \$610 and the interest portion was \$20. The interest had not been accrued.

**Required**

- a. Prepare the June bank reconciliation for the Chicago Scooter Company.
- b. Prepare any necessary adjusting entries.

**SERIAL PROBLEM: KATE'S CARDS**

(Note: This is a continuation of the Serial Problem: Kate's Cards from Chapters 1 through 6.)

**SP7.** On February 15, 2016, Kate Collins, owner of Kate's Cards, asks you to investigate the cash handling activities in her business. She believes that a new employee might be stealing funds. "I have no proof," she says, "but I'm fairly certain that the January 31, 2016, undeposited receipts amounted to more than \$12,000, although the January 31 bank reconciliation prepared by the cashier (who works in the treasurer's department) shows only \$7,238.40. Also, the January bank reconciliation doesn't show several checks that have been outstanding for a long time. The cashier told me that these checks needn't appear on the reconciliation because he had notified the bank to stop payment on them and he had made the necessary adjustment on the books. Does that sound reasonable to you?"

At your request, Kate shows you the following (unaudited) January 31, 2016, bank reconciliation prepared by the cashier:



KATE'S CARDS Bank Reconciliation January 31, 2016			
Ending balance from bank statement . . . . .	\$ 4,843.69	Balance from general ledger . . . . .	\$10,893.89
Add: Deposits in transit . . . . .	<u>7,238.40</u>		
	\$12,082.09		
Less:		Less:	
Outstanding checks:		Bank service charge . . . . . \$ 60.00	
No. 2351 . . . . . \$1,100.20		Unrecorded credit. . . . . <u>1,200.00</u>	<u>(1,260.00)</u>
No. 2353 . . . . . <u>378.32</u>			
No. 2354 . . . . . <u>969.68</u>	<u>(2,448.20)</u>		
Reconciled cash balance . . . . .	<u>\$ 9,633.89</u>	Reconciled cash balance . . . . .	<u>\$ 9,633.89</u>

You discover that the \$1,200 unrecorded bank credit represents a note collected by the bank on Kate's behalf; it appears in the deposits column of the January bank statement. Your investigation also reveals that the December 31, 2015, bank reconciliation showed three checks that had been outstanding longer than 10 months: No. 1432 for \$600, No. 1458 for \$466.90, and No. 1512 for \$253.10. You also discover that these items were never added back into the Cash account in Kate's books. In confirming that the checks shown on the cashier's January 31 bank reconciliation were outstanding on that date, you discover that check No. 2353 was actually a payment of \$1,658.32 and had been recorded on the books for that amount.

To confirm the amount of undeposited receipts at January 31, you request a bank statement for February 1–12 (called a cutoff bank statement). This indeed shows a January 1 deposit of \$7,238.40.

## YOUR TURN! SOLUTIONS

### Solution 7.1

1. This is a personnel policy control violation. The supervisor may be committing a fraud and covering up his acts. If the supervisor were forced to take a vacation, the employee filling in might observe some suspicious activity and uncover the fraud.
2. This is a physical control violation. The unattended inventory could be stolen through the open door.
3. This is a segregation of duties violation. The supervisor is in a position to order an improper purchase, receive the goods for his own purposes, record the goods as received by the company, and then have the company pay for the purchase.

### Solution 7.2

1. (c) Treasurer's department
2. (a) Retail sales supervisor
3. (b) Mailroom
4. (e) Internal audit department
5. (d) Controller's department

### Solution 7.3

1. (a) Add to bank statement balance
2. (b) Subtract from bank statement balance
3. (d) Subtract from cash general ledger account
4. (c) Add to cash general ledger account

### Solution 7A.1

1. (a) Internal audit
2. (b) Financial statement audit
3. (c) Operational audit
4. (b) Financial statement audit
5. (c) Operational audit

## COMPREHENSIVE PROBLEM

The following are selected transactions for Tyler, Inc., for 2014 and 2015. The firm closes its books on December 31.

**2014**

- Dec. 31 Issued \$500,000 of 12 percent, ten-year bonds for \$562,360, yielding an effective rate of ten percent. Interest is payable June 30 and December 31.

**2015**

- June 30 Paid semiannual interest and recorded semiannual premium amortization on bonds.  
Dec. 31 Paid semiannual interest and recorded semiannual premium amortization on bonds.  
31 Called one-half of the bonds in for retirement at 104.

**Required**

Record the transactions using (a) straight-line amortization and (b) effective interest amortization. Round amounts to the nearest dollar. You should read Appendix 10A prior to attempting this comprehensive problem.

**Solution:**

		(a) Straight-line Amortization		(b) Effective Interest Amortization	
<b>2014</b>					
Dec. 31	Cash	562,300		562,300	
	Bonds payable		500,000		500,000
	Premium on bonds payable		62,360		62,360
	<i>Issued \$500,000 of 12 percent, ten-year bonds for \$562,360.</i>				
<b>2015</b>					
June 30	Bond interest expense	26,882		28,118	
	Premium on bonds payable	3,118		1,882	
	Cash		30,000		30,000
	<i>To record semiannual interest payment and premium amortization.</i>				
		$[\$62,360 \div 20 = \$3,118].$		$[\$562,360 \times 0.05 = \$28,118].$	
Dec. 31	Bond interest expense	26,882		28,024	
	Premium on bonds payable	3,118		1,976	
	Cash		30,000		30,000
	<i>To record semiannual interest payment and premium amortization.</i>				
		$[\$62,360 \div 20 = \$3,118].$		$[(\$562,360 - \$1,882) \times 0.05 = \$28,024, \text{ rounded}].$	
31	Bonds payable	250,000		250,000	
	Premium on bonds payable	28,062		29,251	
	Cash		260,000		260,000
	Gain on bond retirement		18,062		19,251
	<i>To record retirement of \$250,000 of bonds; Retirement payment: <math>\\$250,000 \times 1.04 = \\$260,000</math>.</i>				
		$[\$56,124 \times 50\% = \$28,062].$		$[\$58,502 \times 50\% = \$29,251].$	

## APPENDIX 10A: Bond Pricing

We explained that (1) a bond agreement specifies a pattern of future cash flows—usually a series of interest payments and a single payment at maturity equal to the face value—and that (2) bonds are often sold at premiums or discounts to adjust their stated or coupon interest rates to the prevailing market rate of interest when they are issued.

Because of the role played by interest, the selling price of a bond that is necessary to yield a specific rate can be determined as follows:

- 1 Use Appendix E's Table III to calculate the present value of the future principal repayment at the bond's effective rate of interest.

**L05** Explain bond pricing and illustrate the straight-line and effective interest methods of amortizing bond discounts/premiums.

- e. Kane provides a profit-sharing bonus for its executives equal to five percent of the reported before-tax income for the current year. The estimated before-tax income for the current year is \$600,000.

**LO1 E10-2A. Maturity Dates of Notes Payable** Determine the maturity date and compute the interest for each of the following notes payable with add-on interest:

	Date of Note	Principal	Interest Rate (%)	Term
a.	August 5 . . . . .	\$15,000	9	120 days
b.	May 10 . . . . .	8,400	7	90 days
c.	October 5 . . . . .	12,000	9	45 days
d.	July 6 . . . . .	4,500	10	60 days
e.	September 15 . . . . .	12,000	8	75 days

**LO1 E10-3A. Accrued Interest Payable** Compute the interest accrued on each of the following notes payable owed by Northland, Inc., on December 31:

Lender	Date of Note	Principal	Interest Rate (%)	Term
Maple . . . . .	11/21	\$18,000	11	120 days
Wyman . . . . .	12/13	14,000	8	90 days
Nahn . . . . .	12/10	16,000	12	60 days

**LO1 E10-4A. Adjusting Entries for Interest** The following note transactions occurred during the year for Towell Company:

- Nov. 25 Towell issued a 60-day, nine percent note payable for \$8,000 to Hyatt Company for merchandise.
- Dec. 7 Towell signed a 120-day, \$15,000 note at the bank at ten percent.
- 22 Towell gave Barr, Inc., a \$12,000, eight percent, 60-day note in payment of account.

Prepare the general journal entries necessary to adjust the interest accounts at December 31.

**LO1 E10-5A. Excise and Sales Tax Calculations** Barnes Company has just billed a customer for \$1,010, an amount that includes an eleven percent excise tax and a four percent state sales tax.

- a. What amount of revenue is recorded?
- b. Prepare a general journal entry to record the transaction on the books of Barnes Company.

**LO1 E10-6A. Advance Payments for Goods** The Chicago Daily Times Corporation (CDT) publishes a daily newspaper. A 52-week subscription sells for \$221. Assume that CDT sells 100 subscriptions on January 1. None of the subscriptions are cancelled as of March 31.

- a. Prepare a journal entry to record the receipt of the subscriptions on January 1.
- b. Prepare a journal entry to record one week of earned revenue on March 25.

**LO1 E10-7A. Warranty Costs** Milford Company sells a motor that carries a 3-month unconditional warranty against product failure. Based on a reliable statistical analysis, Milford knows that between the sale and the end of the product warranty period, three percent of the units sold will require repair at an average cost of \$60 per unit. The following data reflect Milford's recent experience:

	October	November	December	Dec. 31 Total
Units sold . . . . .	23,000	22,000	25,000	70,000
Known product failures from sales in:				
October . . . . .	120	180	160	460
November . . . . .		130	220	350
December . . . . .			210	210



## EXERCISES—SET B

**E10-1B. Liabilities on the Balance Sheet** For each of the following situations, indicate the amount shown as a liability on the balance sheet of Anchor, Inc., at December 31: **LO1**

- Anchor's general ledger shows a credit balance of \$125,000 in Long-Term Notes Payable. Of this amount, a \$25,000 installment becomes due on June 30 of the following year.
- Anchor estimates its unpaid income tax liability for the current year is \$34,000; it plans to pay this amount in March of the following year.
- On December 31, Anchor received a \$15,000 invoice for merchandise shipped on December 28. The merchandise has not yet been received. The merchandise was shipped F.O.B. shipping point.
- During the year, Anchor collected \$10,500 of state sales tax. At year-end, it has not yet remitted \$1,400 of these taxes to the state department of revenue.
- On December 31, Anchor's bank approved a \$5,000, 90-day loan. Anchor plans to sign the note and receive the money on January 2 of the following year.

**E10-2B. Maturity Dates of Notes Payable** Determine the maturity date and compute the interest for each of the following notes payable: **LO1**

	Date of Note	Principal	Interest Rate (%)	Term
a.	July 10 .....	\$7,200	9	90 days
b.	April 4 .....	6,000	8	120 days
c.	May 19 .....	5,600	7 ½	120 days
d.	June 10 .....	6,500	8	45 days
e.	October 29 .....	10,000	6	60 days

**E10-3B. Accrued Interest Payable** Compute the interest accrued on each of the following notes payable owed by Galloway, Inc., on December 31: **LO1**

Lender	Date of Note	Principal	Interest Rate (%)	Term
Barton .....	12/4	\$10,000	12	150 days
Lawson .....	12/13	14,000	9	90 days
Riley .....	12/19	15,000	11	60 days

**E10-4B. Adjusting Entries for Interest** The following note transactions occurred during the year for Zuber Company: **LO1**

- Nov. 25 Zuber issued a 120-day, 12 percent note payable for \$8,000 to Porter Company for merchandise.
- Dec. 10 Zuber signed a 120-day, \$7,200 note at the bank at ten percent.
- 23 Zuber gave Dale, Inc., a \$9,000, eight percent, 60-day note in payment of account.

Prepare the journal entries necessary to adjust the interest accounts at December 31.

**E10-5B. Excise and Sales Tax Calculations** Allied Company has just billed a customer for \$1,160, an amount that includes a ten percent excise tax and a six percent state sales tax. **LO1**

- What amount of revenue is recorded?
- Prepare a journal entry to record the transaction on the books of Allied Company.

**E10-6B. Advance Payment for Services** The Columbus Bluebirds football team sells a 15-game season ticket for \$180. Assume that the team sells 1,000 season tickets on August 10. The tickets are all used for admission. **LO1**

- Prepare a journal entry to record the sale of the season tickets on August 10.
- Prepare a journal entry to record one game of earned revenue on September 12.

**E10-7B. Warranty Costs** Brigham Company sells an electric timer that carries a 3-month unconditional warranty against product failure. Based on a reliable statistical analysis, Brigham knows that between **LO1**



discount amortization (effective interest method) on June 30, 2015, and (c) the semiannual interest payment and discount amortization on December 31, 2015. Round amounts to the nearest dollar.

**LO2, 5****(Appendix 10A)**

**E10-19B. Bonds Payable Journal Entries; Effective Interest Amortization** On December 31, 2014, Kay Company issued \$400,000 of five-year, 12 percent bonds payable for \$430,887, yielding an effective interest rate of ten percent. Interest is payable semiannually on June 30 and December 31. Prepare journal entries to reflect (a) the issuance of the bonds, (b) the semiannual interest payment and premium amortization (effective interest method) on June 30, 2015, and (c) the semiannual interest payment and premium amortization on December 31, 2015. Round amounts to the nearest dollar.

**LO6****(Appendix 10B)**

**E10-20B. Leases** On January 1, Cooper, Inc., entered into two lease contracts. The first lease contract was an eight-year lease for a sound system with \$25,000 annual lease payments due at the end of each year. Spider took possession of the sound system on January 1. The second lease contract was a nine-month lease, beginning January 1 for warehouse storage space with \$1,750 monthly lease payments due the first of each month. Cooper made the first month's payment on January 1. The present value of the lease payments under the first contract is \$155,159. The present value of the lease payments under the second contract is \$15,238.

- The first lease contract is a capital lease. Prepare the journal entry for this lease on January 1.
- The second lease contract is an operating lease. Prepare the journal entry for this lease on January 1.

## PROBLEMS—SET A

**LO1**

**P10-1A. Journal Entries for Accounts and Notes Payable** Logan Company had the following transactions:



- Apr. 8 Issued a \$5,000, 60-day, six percent note payable in payment of an account with Bennett Company.
- May 15 Borrowed \$40,000 from Lincoln Bank, signing a 60-day note at nine percent.
- June 7 Paid Bennett Company the principal and interest due on the April 8 note payable.
- July 6 Purchased \$12,000 of merchandise from Bolton Company; signed a 90-day note with ten percent interest.
- July 14 Paid the May 15 note due Lincoln Bank.
- Oct. 2 Borrowed \$30,000 from Lincoln Bank, signing a 120-day note at 12 percent.
- 4 Defaulted on the note payable to Bolton Company.

**Required**

- Record these transactions in general journal form.
- Record any adjusting entries for interest in general journal form. Logan Company has a December 31 year-end.

**LO1**

**P10-2A. Adjusting Entries for Interest** At December 31, 2014, Hoffman Corporation had two notes payable outstanding (notes 1 and 2). At December 31, 2015, Hoffman also had two notes payable outstanding (notes 3 and 4). These notes are described below:



	Date of Note	Principal Amount	Interest Rate	Number of Days
<b>December 31, 2014</b>				
Note 1.....	11/16/2014	\$15,000	8%	120
Note 2.....	12/4/2014	16,000	9	60
<b>December 31, 2015</b>				
Note 3.....	12/7/2015	9,000	9	60
Note 4.....	12/21/2015	18,000	12	30

**Required**

- Prepare the adjusting entries for interest at December 31, 2014.
- Assume that the adjusting entries were made at December 31, 2014. Prepare the 2015 journal entries to record payment of the notes that were outstanding at December 31, 2014.
- Prepare the adjusting entries for interest at December 31, 2015.

- LO4 P10-8B. Current Ratio, Quick Ratio, and Times-Interest-Earned Ratio** The following data is from the current accounting records of Sierra Company:

Cash .....	\$240
Accounts receivable (net of allowance of 80) .....	400
Inventory .....	300
Other current assets .....	160
Accounts payable .....	220
Other current liabilities .....	340

The president of the company is concerned that the company may be in violation of a debt covenant that requires the company to maintain a minimum current ratio of 2.0. He believes the best way to rectify the problem is to reverse a bad debt write-off in the amount of \$20 that the company just recorded. He argues that the write-off was done too early and that the collections department should be given more time to collect the outstanding amounts. The CFO argues that this will have no effect on the current ratio, so a better idea is to use \$20 of cash to pay accounts payable early.

**Required**

- Which idea, the president's or the CFO's, is better for attaining a minimum 2.0 current ratio?
- Will either the quick ratio or the times-interest-earned ratios be affected by either of these ideas?

**LO5**  
**(Appendix 10A)**



- P10-9B. Effective Interest Amortization** On December 31, 2015, Echo, Inc., issued \$720,000 of 11 percent, five-year bonds for \$693,504, yielding an effective interest rate of 12 percent. Semiannual interest is payable on June 30 and December 31 each year. The firm uses the effective interest method to amortize the discount.

**Required**

- Prepare an amortization schedule showing the necessary information for the first two interest periods. Round amounts to the nearest dollar.
- Prepare the journal entry for the bond issuance on December 31.
- Prepare the journal entry to record bond interest expense and discount amortization at June 30 of the following year.
- Prepare the journal entry to record bond interest expense and discount amortization at December 31 of the following year.

**LO5**  
**(Appendix 10A)**



- P10-10B. Effective Interest Amortization** On January 1, 2015, Raines, Inc., issued \$250,000 of ten percent, 15-year bonds for \$293,230, yielding an effective interest rate of eight percent. Semiannual interest is payable on June 30 and December 31 each year. The firm uses the effective interest method to amortize the premium.

**Required**

- Prepare an amortization schedule showing the necessary information for the first two interest periods. Round amounts to the nearest dollar.
- Prepare the journal entry for the bond issuance on January 1, 2015.
- Prepare the journal entry to record the bond interest payment and premium amortization at June 30.
- Prepare the journal entry to record the bond interest payment and premium amortization at December 31.



**SERIAL PROBLEM: KATE'S CARDS**

(Note: This is a continuation of the Serial Problem: Kate's Cards from Chapters 1 through 9.)

- SP10.** Recall that Kate previously obtained a \$15,000 bank loan, signing a note payable, on November 30. The note required semiannual interest payments at the rate of six percent. The entire principal balance was due two years from the origination date of the note. Kate has been accruing interest on a monthly basis in the amount of \$75. Kate would like to know how she should record the interest in May, the month she makes the first interest payment. She is unsure how much expense will need to be recorded in May.

The upcoming interest payment is really not Kate's main concern right now. She was just notified by a lawyer that she is being sued for copyright infringement. Mega Cards Incorporated, one of the largest greeting card companies, believes that one of Kate's designs is too similar to one of Mega's

**LO1, 2** SE12-1. **Cash Flow from Operating Activities** Using the information for the Seville Corporation above, calculate the cash flow from operating activities.



**LO1, 2** SE12-2. **Cash Flow from Investing Activities** Using the information for the Seville Corporation above, calculate the cash flow from investing activities.



**LO1, 2** SE12-3. **Cash Flow from Financing Activities** Using the information for the Seville Corporation above, calculate the cash flow from financing activities.



The following information for Smith & Sons relates to Short Exercises 12-4 through 12-6:

Cash flow from operating activities . . . . .	\$1,500,000
Capital expenditures . . . . .	850,000
Current liabilities, beginning of year . . . . .	300,000
Current liabilities, end of year . . . . .	360,000

**LO3** SE12-4. **Free Cash Flow** Using the above data, calculate the free cash flow for Smith & Sons.



**LO3** SE12-5. **Operating-Cash-Flow-to-Current-Liabilities Ratio** Using the above data, calculate the operating-cash-flow-to-current-liabilities ratio for Smith & Sons.



**LO3** SE12-6. **Operating-Cash-Flow-to-Capital-Expenditures Ratio** Using the above data, calculate the operating-cash-flow-to-capital-expenditures ratio for Smith & Sons.



**LO4** SE12-7. **Converting Sales Revenue to Cash** Smith & Sons is converting its sales revenues to corresponding cash amounts using the direct method. Sales revenue on the income statement are \$1,025,000. Beginning and ending accounts receivable on the balance sheet are \$58,000 and \$34,000, respectively. Calculate the amount of cash received from customers.

(Appendix 12A)



**LO4** SE12-8. **Direct Method** Using the following data for Smith & Sons, calculate the cash paid for rent:

(Appendix 12A)



Rent expense . . . . .	\$80,000
Prepaid rent, January 1 . . . . .	10,000
Prepaid rent, December 31 . . . . .	8,000

**LO4** SE12-9. **Direct Method** Using the following data for Smith & Sons, calculate the cash received as interest:

(Appendix 12A)



Interest income . . . . .	\$26,000
Interest receivable, January 1 . . . . .	3,000
Interest receivable, December 31 . . . . .	3,700

**LO4** SE12-10. **Direct Method** Using the following data for Smith & Sons, calculate the cash paid for merchandise purchased:

(Appendix 12A)



Cost of goods sold . . . . .	\$108,000
Inventory, January 1 . . . . .	19,000
Inventory, December 31 . . . . .	22,000
Accounts payable, January 1 . . . . .	11,000
Accounts payable, December 31 . . . . .	7,000

## EXERCISES—SET A

**LO1** E12-1A. **Classification of Cash Flows** For each of the items below, indicate whether the cash flow item relates to an operating activity, an investing activity, or a financing activity:

- Cash receipts from customers for services rendered
- Sale of long-term investments for cash
- Acquisition of plant assets for cash
- Payment of income taxes

**YOUR TURN! 13.1**

The solution is on  
page 692.

No guided example

Conner Company, a retail company, entered into the following transactions during the year:

1. Sold merchandise to customers
2. Settled a major lawsuit
3. Wrote down the book value of a closed warehouse
4. Paid employee wages
5. Disposed of a line of discount stores
6. Paid income taxes

**Required**

Classify each of the above items as either persistent earnings or transitory earnings.



## SOURCES OF INFORMATION

**LO2** Identify the sources of financial information used by investment professionals and **explain** horizontal financial statement analysis

Except for closely held companies, businesses publish their financial statements at least annually. Most large companies also issue quarterly financial data. Normally, annual financial statements are attested to by a certified public accountant, and investment professionals carefully review the independent accountant's opinion to assess the reliability of the published financial data.

Companies listed on stock exchanges must also submit financial statements, called a 10-K for the annual report and 10-Q for the quarterly report, to the U.S. Securities and Exchange Commission (SEC). These statements are available to any interested party and are generally more useful than annual reports because they contain greater detail.

Investment professionals may also want to compare the performance of a particular firm with that of the other firms in the same industry. Data on industry norms, median financial ratios by industry, and other relationships are available from such data collection services as Dun & Bradstreet, Moody's, and Standard and Poor's. In addition, some brokerage firms compile industry norms and financial ratios from their own computer databases.

### ACCOUNTING IN PRACTICE

#### SEC EDGAR Database

An example of a financial database is **EDGAR**, the Electronic Data Gathering, Analysis, and Retrieval system, maintained by the U.S. SEC ([www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml)). This computer database aids financial statement analysis by performing automated data collection, validation, indexing, acceptance, and forwarding of submissions by companies and others who are required by law to file forms with the U.S. Securities and Exchange Commission. The primary intent of the SEC in creating EDGAR was to increase the efficiency of the securities market for the benefit of investors, corporations, and the economy, by accelerating the receipt, acceptance, dissemination, and analysis of corporate information filed with the agency. An "efficient" securities market means that investors are able to make the best possible decisions regarding where and when to invest their funds.

## Analytical Techniques

The absolute dollar amounts of net income, sales revenue, total assets, and other key data are usually not meaningful when analyzed in isolation. For example, knowing that a company's annual net income is \$1 million is of little informational value unless the amount of the income can be related to other factors. A \$1 million profit might represent excellent performance for a company with less than \$10 million in invested capital. On the other hand, \$1 million in net income would be considered meager for a firm that had several hundred million dollars in invested capital. Thus, significant information can be derived by examining the relationship between two or more accounting variables, such as net income and total assets, net income and sales revenue, or net income and stockholders' equity. To describe these relationships clearly and to make comparisons easy, the relationships are often expressed in terms of ratios or percentages.

**SE13-14. Financial Statement Analysis Limitations** Which of the following is not considered a limitation of financial statement analysis? **LO5**

- a. Firms may use different accounting methods.
- b. Firms may be audited by different auditing firms.
- c. Inflation may distort trend analysis.
- d. It may be difficult to classify large conglomerate firms by industry.

**SE13-15. Financial Statement Disclosures** Which of the following is not a common form of financial statement disclosure? **LO6**  
(Appendix 13A)

- a. Notes to financial statements.
- b. Supplemental information.
- c. Parenthetical disclosure.
- d. Bullet points.

## EXERCISES—SET A

**E13-1A. Income Statement Sections** During the current year, Dale Corporation sold a segment of its business at a gain of \$210,000. Until it was sold, the segment had a current period operating loss of \$75,000. The company had \$850,000 income from continuing operations for the current year. Prepare the lower part of the income statement, beginning with the \$850,000 income from continuing operations. Follow tax allocation procedures, assuming that all changes in income are subject to a 35 percent income tax rate. Disregard earnings per share disclosures. **LO1**

**E13-2A. Earnings per Share** Lucky Corporation began the year with a simple capital structure consisting of 240,000 shares of outstanding common stock. On April 1, 5,000 additional common shares were issued, and another 30,000 common shares were issued on August 1. The company had net income for the year of \$589,375. Calculate the earnings per share of common stock. **LO4**

**E13-3A. Comparative Income Statements** Consider the following income statement data from the Ross Company: **LO2**

	2016	2015
Sales revenue . . . . .	\$550,000	\$450,000
Cost of goods sold . . . . .	336,000	279,000
Selling expenses . . . . .	105,000	99,000
Administrative expenses . . . . .	60,000	50,000
Income tax expense . . . . .	7,800	5,400

- a. Prepare a comparative income statement, showing increases and decreases in dollars and in percentages.
- b. Comment briefly on the changes between the two years.

**E13-4A. Common-Size Income Statements** Refer to the income statement data given in Exercise E13-3A. **LO3**

- a. Prepare common-size income statements for each year.
- b. Compare the common-size income statements and comment briefly.

**E13-5A. Ratios Analyzing Firm Profitability** The following information is available for Buhler Company: **LO4**

Annual Data	2016	2015
Net sales . . . . .	\$8,600,000	\$8,200,000
Gross profit on sales . . . . .	3,050,000	2,736,000
Net income . . . . .	567,600	488,000

- a. Sales by the Farm and Equipment segment to independent dealers are recorded at the time of shipment to those dealers. Sales through company-owned retail stores are recorded at the time of sale to retail customers.
- b. Members of the board of directors, the advisory board, and employees are not charged the vendor's commission on property sold at auction for their benefit. (From the notes of an auctioneer company.)
- c. Sales to an airline company accounted for approximately 45 percent of the company's net sales in the current year.
- d. The company's product liability insurance coverage with respect to insured events occurring after January 1 of the current year is substantially less than the amount of that insurance available in the recent past. The company is now predominantly self-insured in this area. The reduction in insurance coverage reflects trends in the liability insurance field generally and is not unique to the company.

### PROBLEMS—SET A

- LO1 P13-1A. Income Statement Format** The following information from Belvidere Company's current operations is available:



Administrative expenses	\$ 73,000
Cost of goods sold	464,000
Sales revenue	772,000
Selling expenses	87,000
Interest expense	10,000
Loss from operations of discontinued segment	60,000
Gain on disposal of discontinued segment	40,000
Income taxes:	
Amount applicable to ordinary operations	60,000
Reduction applicable to loss from operations of discontinued segment	24,000
Amount applicable to gain on disposal of discontinued segment	16,000

#### Required

- a. Prepare a multiple-step income statement. (Disregard earnings per share.)
- b. Prepare a single-step income statement. (Disregard earnings per share.)

- LO4 P13-2A. Earnings per Share** Leland Corporation began the year with 150,000 shares of common stock outstanding. On March 1 an additional 10,000 shares of common stock were issued. On August 1, another 16,000 shares of common stock were issued. On November 1, 6,000 shares of common stock were acquired as Treasury Stock. Leland Corporation's net income for the calendar year is \$516,000.



#### Required

Calculate the company's earnings per share.

- LO1, 4 P13-3A. Earnings per Share and Multiple-Step Income Statement** The following summarized data relate to Bowden Corporation's current operations:



Sales revenue	\$760,000
Cost of goods sold	450,000
Selling expenses	65,000
Administrative expenses	72,000
Loss on sale of equipment	5,000
Income tax expense (not allocated)	42,000
Shares of common stock	
Outstanding at January 1	20,000 shares
Additional issued at May 1	7,000 shares
Additional issued at November 1	2,000 shares



**Required**

Prepare a multiple-step income statement for Bowden Corporation for the year. ~~Assume a 25 percent income tax rate. Allocate income tax expense within the income statement.~~ Include earnings per share disclosure at the bottom of the income statement.

- P13-4A. Trend Percentages** Net sales, net income, and total asset figures for Vibrant Controls, Inc., for five consecutive years are given below (Vibrant manufactures pollution controls):

	Annual Amounts (Thousands of Dollars)				
	Year 1	Year 2	Year 3	Year 4	Year 5
Net sales . . . . .	\$71,500	\$79,800	\$85,275	\$88,400	\$94,700
Net income . . . . .	3,200	3,650	3,900	4,250	4,790
Total assets . . . . .	42,500	46,200	48,700	51,000	54,900

**Required**

- Calculate trend percentages, using Year 1 as the base year.
- Calculate the return on sales for each year. (Rates above 2.8 percent are considered good for manufacturers of pollution controls; rates above 6.4 percent are considered very good.)
- Comment on the results of your analysis.

- P13-5A. Changes in Various Ratios** Presented below is selected information for Brimmer Company:

	2016	2015
Sales revenue . . . . .	\$920,000	\$840,000
Cost of goods sold . . . . .	575,000	545,000
Interest expense . . . . .	20,000	20,000
Income tax expense . . . . .	27,000	30,000
Net income . . . . .	61,000	52,000
Cash flow from operating activities . . . . .	65,000	55,000
Capital expenditures . . . . .	45,000	45,000
Accounts receivable (net), December 31 . . . . .	126,000	120,000
Inventory, December 31 . . . . .	196,000	160,000
Stockholders' equity, December 31 . . . . .	450,000	400,000
Total assets, December 31 . . . . .	750,000	675,000

**Required**

- Calculate the following ratios for 2016. The 2015 results are given for comparative purposes.

	2015
1. Gross profit percentage . . . . .	33.5 percent
2. Return on assets . . . . .	8.3 percent
3. Return on sales . . . . .	6.2 percent
4. Return on common stockholders' equity (no preferred stock was outstanding) . . . . .	13.9 percent
5. Accounts receivable turnover . . . . .	7.50
6. Average collection period . . . . .	48.7 days
7. Inventory turnover . . . . .	3.61
8. Times-interest-earned ratio . . . . .	4.80
9. Operating-cash-flow-to-capital-expenditures ratio . . . . .	1.22

- Comment on the changes between the two years.

- P13-6A. Ratios from Comparative and Common-Size Data** Consider the following financial statements for Waverly Company.

During 2016, management obtained additional bond financing to enlarge its production facilities. The company faced higher production costs during the year for such things as fuel, materials, and freight. Because of temporary government price controls, a planned price increase on products was delayed several months.

As a holder of both common and preferred stock, you decide to analyze the financial statements:

Administrative expenses	\$ 145,000
Cost of goods sold	928,000
Sales revenue	1,650,000
Selling expenses	174,000
Interest expense	14,000
Loss from operations of discontinued segment	120,000
Gain on disposal of discontinued segment	90,000
Income taxes	
Amount applicable to ordinary operations	115,000
Reduction applicable to loss from operations of discontinued segment	68,000
Amount applicable to gain on disposal of discontinued segment	30,000

**Required**

- Prepare a multiple-step income statement. (Disregard earnings per share amounts.)
- Prepare a single-step income statement. (Disregard earnings per share amounts.)

**LO4 P13-2B. Earnings per Share** Island Corporation began the year with 50,000 shares of common stock outstanding. On May 1, an additional 12,000 shares of common stock were issued. On July 1, 20,000 shares of common stock were acquired as treasury stock. On September 1, the 6,000 treasury shares of common stock were reissued. Island Corporation's net income for the calendar year is \$230,000.

**Required**

Compute earnings per share.

**LO1, 4 P13-3B. Earnings per Share and Multiple-Step Income Statement** The following summarized data are related to Garner Corporation's operations:

Sales revenue	\$2,216,000
Cost of goods sold	1,290,000
Selling expenses	180,000
Administrative expenses	142,800
Loss from plant strike	95,000
Income tax expense	204,000
Shares of common stock	
Outstanding at January 1	65,000 shares
Additional issued at April 1	17,000 shares
Additional issued at August 1	3,000 shares

**Required**

Prepare a multiple-step income statement for Garner Corporation. ~~Assume a 40 percent income tax rate.~~ Include earnings per share disclosure at the bottom of the income statement. Garner Corporation has no preferred stock.

**LO2 P13-4B. Trend Percentages** Sales of automotive products for Ford Motor Company and General Motors Corporation for a five-year period are:

	Net Sales of Automotive Products (Millions of Dollars)				
	Year 1	Year 2	Year 3	Year 4	Year 5
Ford Motor Company	\$82,879	\$81,844	\$72,051	\$ 84,407	\$ 91,568
General Motors Corporation	99,106	97,312	94,828	103,005	108,027

Net sales for Pfizer Inc. and Abbott Laboratories for the same five years follow:





**LO1 13. In classifying investments, how do held-to-maturity securities differ from other marketable securities?**

- The investor plans to hold the securities until they mature.
- The investor has the ability to exercise significant influence over management of the investee.
- The investor has the ability to control the investee.
- These securities have a high degree of liquidity.

## QUESTIONS

- Debt security investments are placed in one of three investment categories. What are these three categories?
- Equity security investments are placed in one of four investment categories. What are these four categories?
- Caldwell Company invests in bonds at a premium. Caldwell does not intend to sell the bonds in the near future, nor does it intend to hold the bonds to maturity. Should the bond premium be amortized? What measure should be used to report these bonds on the company's year-end balance sheet?
- What measure should be used to report trading securities on the balance sheet? Available-for-sale securities? Held-to-maturity securities?
- What is an unrealized gain? Unrealized loss?
- Where are unrealized gains and losses related to trading securities reported in the financial statements? Where are unrealized gains and losses related to available-for-sale securities reported in the financial statements?
- What is an influential stock investment? Describe the accounting procedures used for such investments.
- On January 1, Mower Company purchased 40 percent of the common stock of Starr Company for \$250,000. During the year, Starr reported \$80,000 of net income and paid \$60,000 in cash dividends. At year-end, what amount should appear on Mower's balance sheet for its investment in Starr?
- What accounting procedures are used when a stock investment represents more than 50 percent of the investee company's voting stock?
- What is the purpose of consolidated financial statements?
- What are the inherent limitations of consolidated financial statements?

## EXERCISES—SET A



**LO2 ED-1A. Accounting for Debt Securities—Trading** Gressens Company had the following transactions and adjustments related to a bond investment:

2016

- Oct. 1 Purchased \$500,000 face value of Skyline, Inc.'s 7 percent bonds at 97 plus a brokerage commission of \$1,000. The bonds pay interest on September 30 and March 31 and mature in 20 years. Gressens expects to sell the bonds in the near future.
- Dec. 31 Made the adjusting entry to record interest earned on investment in the Skyline bonds.
- 31 Made the adjusting entry to record the current fair value of the Skyline bonds. At December 31, the market value of the Skyline bonds was \$490,000.

2017

- Mar. 31 Received the semiannual interest payment on investment in the Skyline bonds.
- Apr. 1 Sold the Skyline bond investment for \$492,300 cash.

Record the transactions and adjustments of the Gressens Company using journal entries.



**LO2 ED-2A. Accounting for Debt Securities—Available-for-Sale** Hilyn Company had the following transactions and adjustments related to a bond investment:

2016

- Jan. 1 Purchased \$800,000 face value of Cynad, Inc.'s 9 percent bonds at 99 plus a brokerage commission of \$1,400. The bonds pay interest on June 30 and December 31 and mature in 15 years. Hilyn does not expect to sell the bonds in the near future, nor does it intend to hold the bonds to maturity.

- June 30 Received the semiannual interest payment on the Cynad bonds and amortized the bond discount for six months. Hilyn uses the straight-line method to amortize bond discounts and premiums.
- Dec. 31 Received the semiannual interest payment on the Cynad bonds and amortized the bond discount for six months.
- 31 Made the adjusting entry to record the current fair value of the Cynad bonds. At December 31, the market value of the Cynad bonds was \$790,000.
- 2017
- June 30 Received the semiannual interest payment on the Cynad bonds and amortized the bond discount for six months.
- July 1 Sold the Cynad bond investment for \$792,500 cash.
- Dec. 31 Made the adjusting entry to eliminate balances from the Fair Value Adjustment to Bond Investment account and the Unrealized Gain/Loss on Investments (Equity) account.

Record the transactions and adjustments of Hilyn Company using journal entries.

**ED-3A. Accounting for Debt Securities—Held-to-Maturity** Kurl Company had the following transactions and adjustments related to a bond investment: **L02**

- 2016
- Jan. 1 Purchased \$600,000 face value of Sphere, Inc.'s 9 percent bonds at 102 plus a brokerage commission of \$900. The bonds pay interest on June 30 and December 31 and mature in 10 years. Kurl expects to hold the bonds to maturity.
- June 30 Received the semiannual interest payment on the Sphere bonds and amortized the bond premium for six months. Kurl uses the straight-line method to amortize bond discounts and premiums.
- 2025
- Dec. 31 Received the semiannual interest payment on the Sphere bonds and amortized the bond premium for six months.
- 31 Received the principal amount in cash on maturity date of the Sphere bonds.

Record the transactions and adjustments of Kurl Company using journal entries.

**ED-4A. Accounting for Equity Securities—Trading** The Glass Company had the following transactions and adjustment related to a stock investment: **L03**

- 2016
- Nov. 15 Purchased 6,000 shares of Erie, Inc.'s common stock at \$12 per share plus a brokerage commission of \$750. Glass expects to sell the stock in the near future.
- Dec. 22 Received a cash dividend of \$1.10 per share of common stock from Erie.
- 31 Made the adjusting entry to reflect year-end fair value of the stock investment in Erie. The year-end market price of the Erie common stock is \$11.25 per share.
- 2017
- Jan. 20 Sold all 6,000 shares of the Erie common stock for \$66,900.

Record the transactions and adjustment of the Glass Company using journal entries.

**ED-5A. Accounting for Equity Securities—Available-for-Sale** Refer to the data for the Glass Company in ED-4A. Assume that when the shares were purchased, management did not intend to sell the stock in the near future. Record the transactions and adjustment for Glass Company under this assumption using journal entries. In addition, prepare any adjusting entry needed at December 31, 2017. **L03**

**ED-6A. Accounting for Equity Securities—Influential** The Dunn Company had the following transactions and adjustment related to a stock investment: **L03**

- 2016
- Jan. 15 Purchased 12,000 shares of Van, Inc.'s common stock at \$9 per share plus a brokerage commission of \$900. These shares represent a 30 percent ownership of Van's common stock.
- Dec. 31 Received a cash dividend of \$1.25 per share of common stock from Van.
- 31 Made the adjusting entry to reflect income from the Van stock investment. Van's 2016 net income is \$80,000.



2017

Jan. 20 Sold all 12,000 shares of the Van common stock for \$120,500.

Record the transactions and adjustment of the Dunn Company using journal entries.

- LO3 ED-7A. Accounting for Equity Securities** On March 15, Kat Corp. purchased 200 shares of common stock of Scott Company for \$15 per share. Kat Corp. is not able to exercise significant influence over Scott. On December 31, the market value of the Scott stock was \$14.00 per share. Kat Corp. plans to hold the stock for the unforeseeable future.

- Upon the purchase of the Scott stock, how should Kat Corp. classify the shares on its balance sheet? Justify your answer.
- Record all transactions necessary for Kat.

- LO3 ED-8A Recording Influential Securities** On January 3, Mahony Farm purchased 20% of the outstanding stock of Flepo Company for \$80,000. The purchase gave Mahony the ability to exercise significant influence over Flepo. During the year, Flepo paid cash dividends totaling \$70,000 and reported net income for the year of \$90,000.

Record all transactions necessary for Mahony Farm.

- LO3 ED-9A. Accounting for Equity Securities** Microsoft, Inc., maintained a large investment in marketable securities valued at approximately \$42 billion as of the beginning of the year. During the year, the securities produced investment income (dividends and interest income) totaling \$2 billion. At year-end, the portfolio of marketable securities had appreciated to \$43.5 billion.

Calculate the income statement effect of the marketable securities if:

- The entire portfolio is classified as trading securities.
- The entire portfolio is classified as available-for-sale securities.

- LO4 ED-10A. Consolidation Accounting** Fletcher Company, a manufacturer of precision mining equipment, acquired 100 percent of the outstanding common stock of Denfork Company, a small mining company with several mines that extract rare earth materials.

- How should Fletcher account for this acquisition during the year?
- What adjustments are needed at year-end?
- What limitations are present in this method of accounting?

## EXERCISES—SET B

- LO2 ED-1B. Accounting for Debt Securities—Trading** Sanders, Inc. had the following transactions and adjustments related to a bond investment:

2016

Nov. 1 Purchased \$300,000 face value of Batem, Inc.'s 9 percent bonds at 102 plus a brokerage commission of \$900. The bonds pay interest on October 31 and April 30 and mature in 15 years. Sanders expects to sell the bonds in the near future.

Dec. 31 Made the adjusting entry to record interest earned on investment in the Batem bonds.

31 Made the adjusting entry to record the current fair value of the Batem bonds. At December 31, the market value of the Batem bonds was \$301,500.

2017

Apr. 30 Received the semiannual interest payment on investment in the Batem bonds.

May 1 Sold the Batem bond investment for \$300,900 cash.

Record the transactions and adjustments of the Sanders Company using journal entries.

- LO2 ED-2B. Accounting for Debt Securities—Available-for-Sale** The Witt Company had the following transactions and adjustments related to a bond investment:

2016

Jan. 1 Purchased \$600,000 face value of Chevy, Inc.'s 8 percent bonds at 101 plus a brokerage commission of \$1,400. The bonds pay interest on June 30 and December 31 and mature in 10 years. Witt does not expect to sell the bonds in the near future, nor does it intend to hold the bonds to maturity.

- June 30 Received the semiannual interest payment on the Chevy bonds and amortized the bond premium for six months. Witt uses the straight-line method to amortize bond discounts and premiums.
- Dec. 31 Received the semiannual interest payment on the Chevy bonds and amortized the bond premium for six months.
- Dec. 31 Made the adjusting entry to record the current fair value of the Chevy bonds. At December 31, the market value of the Chevy bonds was \$609,000.
- 2017
- June 30 Received the semiannual interest payment on the Chevy bonds and amortized the bond premium for six months.
- July 1 Sold the Chevy bond investment for \$608,500 cash.
- Dec. 31 Made the adjusting entry to eliminate balances from the Fair Value Adjustment to Bond Investment account and the Unrealized Gain/Loss on Investments (Equity) account.

Record the transactions and adjustments of the Witt Company using journal entries.

**ED-3B. Accounting for Debt Securities—Held-to-Maturity** The Shepler Company had the following transactions and adjustments related to a bond investment: **LO2**

- 2016
- Jan. 1 Purchased \$250,000 face value of Lowe, Inc.'s 6 percent bonds at 98 plus a brokerage commission of \$500. The bonds pay interest on June 30 and December 31 and mature in 15 years. Shepler expects to hold the bonds to maturity.
- June 30 Received the semiannual interest payment on the Lowe bonds and amortized the bond discount for six months. Shepler uses the straight-line method to amortize bond discounts and premiums.
- 2030
- Dec. 31 Received the semiannual interest payment on the Lowe bonds and amortized the bond discount for six months.
- 31 Received the principal amount in cash on maturity date of the Lowe bonds.

Record the transactions and adjustments of the Shepler Company using journal entries.

**ED-4B. Accounting for Equity Securities—Trading** The Dale Company had the following transactions and adjustment related to a stock investment: **LO3**

- 2016
- Nov. 15 Purchased 5,000 shares of Lake, Inc.'s common stock at \$16 per share plus a brokerage commission of \$900. Dale Company expects to sell the stock in the near future.
- Dec. 22 Received a cash dividend of \$1.25 per share of common stock from Lake.
- 31 Made the adjusting entry to reflect year-end fair value of the stock investment in Lake. The year-end market price of the Lake common stock is \$17.50 per share.
- 2017
- Jan. 20 Sold all 5,000 shares of the Lake common stock for \$86,400.

Record the transactions and adjustment of the Dale Company using journal entries.

**ED-5B. Accounting for Equity Securities—Available-for-Sale** Refer to the data for Dale Company in ED-4B. Assume that when the shares were purchased, management did not intend to sell the stock in the near future. Record the transactions and adjustment for Dale Company under this assumption using journal entries. In addition, prepare any adjusting entry needed at December 31, 2017. **LO3**

**ED-6B. Accounting for Equity Securities—Influential** The Prince Company had the following transactions and adjustment related to a stock investment: **LO3**

- 2016
- Jan. 15 Purchased 15,000 shares of Park, Inc.'s common stock at \$8 per share plus a brokerage commission of \$1,000. These shares represent a 25 percent ownership of the Park common stock.
- Dec. 31 Received a cash dividend of \$0.80 per share of common stock from Park.
- 31 Made the adjusting entry to reflect income from the Park stock investment. Park's 2016 net income is \$120,000.



2017

Jan. 20 Sold all 15,000 shares of the Park common stock for \$132,000.

Record the above transactions for the Prince Company using journal entries.

**LO3 ED-7B. Accounting for Equity Securities** On March 15, Kit Corp. purchased 400 shares of common stock of Murat Company for \$25 per share. Kit Corp. is not able to exercise significant influence over Murat. On December 31, the market value of the Murat stock was \$27.00 per share. Kat Corp. plans to sell the stock soon.

- Upon the purchase of the Murat stock, how should Kit Corp. classify the shares on its balance sheet? Justify your answer.
- Record all transactions necessary for Kit.

**LO3 ED-8B. Recording Influential Securities** On January 3, Negrito Farm purchased 25% of the outstanding stock of Philip Company for \$90,000. The purchase gave Negrito the ability to exercise significant influence over Philip. During the year, Philip paid cash dividends totaling \$80,000 and reported net income for the year of \$100,000.

Record all transactions necessary for Negrito Farm.

**LO3 ED-9B. Accounting for Equity Securities**

Macroview, Inc., maintained a large investment in marketable securities valued at approximately \$60 billion as of the beginning of the year. During the year, the securities produced investment income (dividends and interest income) totaling \$3 billion. At year-end, the portfolio of marketable securities had appreciated to \$64.5 billion.

Calculate the income statement effect of the marketable securities if:

- The entire portfolio is classified as trading securities
- The entire portfolio is classified as available-for-sale securities

**LO4 ED-10B. Consolidation Accounting** Peyton Company, a manufacturer of silicon chips, acquired 100 percent of the outstanding common stock of Visik Company, a small manufacturer of mobile computing devices.

- How should Peyton account for this acquisition during the year?
- What adjustments are needed at year-end?
- What limitations are present in this method of accounting?

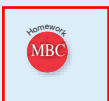
## PROBLEMS—SET A

**LO2 PD-1A. The Analysis of Bond Investments** Columbia Company began operations in 2016 and by year-end (December 31) had made six bond investments. Year-end information on these bond investments follows:

Company	Face Value	Cost or Amortized Cost	Year-End Market Value	Classification
Ling, Inc. . . . .	\$100,000	\$102,400	\$105,300	Trading
Wren, Inc. . . . .	\$250,000	\$262,500	\$270,000	Trading
Olanamic, Inc. . . . .	\$200,000	\$197,000	\$199,000	Available for sale
Fossil, Inc. . . . .	\$150,000	\$154,000	\$160,000	Available for sale
Meander, Inc. . . . .	\$100,000	\$101,200	\$102,400	Held to maturity
Resin, Inc. . . . .	\$140,000	\$136,000	\$137,000	Held to maturity

### Required

- At what total amount will the trading bond investments be reported on the December 31 balance sheet?
- At what total amount will the available-for-sale bond investments be reported on the December 31 balance sheet?
- At what total amount will the held-to-maturity bond investments be reported on the December 31 balance sheet?



- d. What total amount of unrealized holding gains or unrealized holding losses related to bond investments will appear on the income statement?
- e. What total amount of unrealized holding gains or unrealized holding losses related to bond investments will appear in the stockholders' equity section of the December 31 balance sheet?
- f. What total amount of fair value adjustment to bond investments will appear on the December 31 balance sheet? Which category of bond investments does the fair value adjustment relate to? Does the fair value adjustment increase or decrease the financial statement presentation of these bond investments?

**PD-2A. Bond Investment Journal Entries** The following transactions and adjustments relate to bond investments acquired by Bloom Corporation:

LO2



2016

- June 30 Purchased \$200,000 face value of Dynamo, Inc.'s 20-year, 9 percent bonds dated June 30, 2016, for \$215,200 cash. Interest is paid December 31 and June 30. The investment is classified as an available-for-sale security.
- Dec. 31 Received the semiannual interest payment from Dynamo and amortized the bond premium (straight-line method).
- 31 Purchased \$300,000 face value of Link, Inc.'s 10-year, 7 percent bonds dated December 31, 2016, for \$297,000 cash. Interest is paid June 30 and December 31. The investment is classified as a held-to-maturity security.
- 31 Made an adjusting entry to record the current fair value of the Dynamo bonds. At December 31, the market value was \$216,000.

2017

- June 30 Received the semiannual interest payment from Dynamo and amortized the bond premium.
- 30 Received the semiannual interest payment from Link and amortized the bond discount (straight-line method).
- July 1 Sold the Dynamo bonds for \$216,500.
- Oct. 31 Purchased \$60,000 face value of Taxco, Inc.'s 5-year, 8 percent bonds dated October 31, 2017, for \$60,500. Interest is paid April 30 and October 31. The investment is classified as a trading security.
- Dec. 31 Received the semiannual interest payment from Link and amortized the bond discount.
- 31 Made an adjusting entry to record interest earned on the investment in Taxco bonds.
- 31 Made an adjusting entry to record the current fair value of the Taxco bonds. At December 31, the market value of the bonds was \$59,200.
- 31 Made an adjusting entry to eliminate balances in the Fair Value Adjustment to Bond Investment account and the Unrealized Gain/Loss on Investments (Equity) account.

### Required

Prepare the journal entries to record these transactions and adjustments.

**PD-3A. Stock Investment Journal Entries** The following transactions and adjustments relate to stock investments made by Steen Corporation:

LO3



2016

- July 1 Purchased 1,000 shares of Polk, Inc.'s common stock for \$66,200 cash. The investment is noninfluential and noncontrolling and is classified as a trading security.
- Oct. 1 Purchased 3,000 shares of Wynn, Inc.'s common stock for \$78,000 cash and 2,000 shares of Maple, Inc.'s common stock for \$64,000 cash. These investments are noninfluential and noncontrolling and are classified as available-for-sale securities. (Note: Use two separate investment accounts.)
- Nov. 9 Received a cash dividend of 90 cents per share on the Wynn stock.
- Dec. 31 Made an adjusting entry to record the current fair value of the Polk stock. At December 31, the stock has a market value of \$63.00 per share.
- 31 Made an adjusting entry to record the current fair value of the Wynn and Maple stocks. At December 31, the Wynn stock has a market value of \$27.50 per share and the Maple stock has a market value of \$31.00 per share. (Note: Make one adjusting entry for the portfolio of available-for-sale stocks.)



2017

Feb. 1 Sold the Polk stock for \$62 per share.

Dec. 31 Made an adjusting entry to record the current fair value of the Wynn and Maple stocks.

At December 31, the per-share market values are Wynn, \$30.00, and Maple, \$33.00.

(Note: Be sure to allow for the adjustment made at December 31.)

**Required**

Prepare the journal entries to record these transactions and adjustments.

- LO3 PD-4A. Contrasting Journal Entries for Stock Investments: Trading and Equity Methods** On January 2, 2016, Trubek Corporation purchased 10,000 shares of Forge Company common stock for \$15 per share, including commissions and taxes. On December 31, 2016, Forge announced its net income of \$80,000 for the year and paid a dividend of \$1.10 per share. At December 31, 2016, the market value of Forge's stock was \$19 per share. Trubek received its dividend on December 31, 2016.

**Required**

- Assume that the stock acquired by Trubek represents 15 percent of Forge's voting stock and is classified as a trading security. Prepare all journal entries appropriate for this investment.
- Assume that the stock acquired by Trubek represents 25 percent of Forge's voting stock. Prepare all journal entries appropriate for this investment.

- LO3 PD-5A. Recording Influential Securities** At the beginning of the year, the Carlton and United Brewery (CUB) of Melbourne, Australia, purchased a 30 percent ownership interest in Icehouse Brewery of Brisbane, Australia. The investment cost \$30 million. At year-end, Icehouse Brewery declared and paid cash dividends to shareholders totaling \$800,000, after reporting earnings of \$5 million.

**Required**

- Calculate the income statement effect of CUB's investment in Icehouse Brewery as of year-end.
- Calculate the book value of CUB's equity investment in Icehouse Brewery at year-end.
- Calculate the book value of CUB's equity investment in Icehouse Brewery at year-end assuming that Icehouse reported a loss of \$3 million instead of a profit of \$5 million and still paid its dividend of \$800,000.

- LO3 PD-6A. Accounting for Equity Securities** Susan Company has the following securities in its portfolio on December 31, 2017:

	Cost	Market Values	
		Dec. 31, 2017	Dec. 31, 2016
5,000 shares of Answa Corp. ....	\$60,000	\$58,000	\$ 0
10,000 shares of Smiler Co. ....	80,000	85,300	88,400

Additional information:

- Susan is not able to exercise significant influence over either of the investments.
- The Smiler Company securities were purchased at the beginning of 2016 and the appropriate year-end adjustments were made at the end of that year. Susan intends to hold the Smiler stock for long-term growth.
- The investment in Answa Corp. was in anticipation of a quick sale during February of 2018.
- During 2017, Susan received cash dividends of \$700 from Smiler Corp.

**Required**

- How will each of the two securities be accounted for by Susan Company? Justify your choices.
- Prepare a partial balance sheet and partial income statement at December 31, 2017, which reflect the transactions provided.

**PROBLEMS—SET B**

- LO3 PD-1B. The Analysis of Stock Investments** The Discovery Company began operations in 2016, and by year-end (December 31), had made six stock investments. Year-end information on these stock investments follows:



Company	Cost or Equity (as appropriate)	Year-End Market Value	Classification
Lisle, Inc. ....	\$ 68,000	\$ 65,300	Trading
Owl, Inc. ....	\$162,500	\$160,000	Trading
Bionamic, Inc. ....	\$197,000	\$192,000	Available for sale
Foote, Inc. ....	\$157,000	\$154,700	Available for sale
Buckley, Inc. ....	\$100,000	\$102,400	Influential
Riccer, Inc. ....	\$136,000	\$133,200	Influential

**Required**

- At what total amount will the trading stock investments be reported on the December 31 balance sheet?
- At what total amount will the available-for-sale stock investments be reported on the December 31 balance sheet?
- At what total amount will the influential stock investments be reported on the December 31 balance sheet?
- What total amount of unrealized holding gains or unrealized holding losses related to stock investments will appear on the income statement?
- What total amount of unrealized holding gains or unrealized holding losses related to stock investments will appear in the stockholders' equity section of the December 31 balance sheet?
- What total amount of fair value adjustment to stock investments will appear on the December 31 balance sheet? Which category of stock investments does the fair value adjustment relate to? Does the fair value adjustment increase or decrease the financial statement presentation of these stock investments?

**PD-2B. Bond Investment Journal Entries** The following transactions and adjustments relate to bond investments acquired by Jackson Corporation:

**LO2**

2016

- June 30 Purchased \$100,000 face value of Alamo, Inc.'s 20-year, 7 percent bonds dated June 30, 2016, for \$97,200 cash. Interest is paid December 31 and June 30. The investment is classified as an available-for-sale security.
- Dec. 31 Received the semiannual interest payment from Alamo and amortized the bond discount (straight-line method).
- 31 Purchased \$300,000 face value of Lyme, Inc.'s 10-year, 8 percent bonds dated December 31, 2016, for \$304,000 cash. Interest is paid June 30 and December 31. The investment is classified as a held-to-maturity security.
- 31 Made an adjusting entry to record the current fair value of the Alamo bonds. At December 31, the market value was \$96,400.

2017

- June 30 Received the semiannual interest payment from Alamo and amortized the bond discount.
- 30 Received the semiannual interest payment from Lyme and amortized the bond premium (straight-line method).
- July 1 Sold the Alamo bonds for \$96,500.
- Oct. 31 Purchased \$80,000 face value of Weir, Inc.'s 5-year, 7.57 percent bonds dated October 31, 2017, for \$79,000. Interest is paid April 30 and October 31. The investment is classified as a trading security.
- Dec. 31 Received the semiannual interest payment from Lyme and amortized the bond premium.
- 31 Made an adjusting entry to record interest earned on investment in the Weir bonds.
- 31 Made an adjusting entry to record the current fair value of Weir bonds. At December 31, the market value of the bonds was \$79,900.
- 31 Made an adjusting entry to eliminate balances in the Fair Value Adjustment to Bond Investment account and the Unrealized Gain/Loss on Investments (Equity) account.

**Required**

Prepare the journal entries to record these transactions and adjustments.

**PD-3B. Stock Investment Journal Entries** The following transactions and adjustments relate to stock investments made by Kramer Corporation:

**LO3**