

3

Processing Accounting Information

PAST

Chapters 1 and 2 described the environment of financial accounting. They also introduced the financial statements and basic analysis of them.

PRESENT

This chapter explains the accounting system, including transaction analysis, the system of debits and credits, and the journalizing of transactions.

FUTURE

Chapter 4 describes accounting adjustments, the construction of financial statements, and the period-end closing process.

LEARNING OBJECTIVES

- 1 Identify** the five major steps in the accounting cycle. (p. 100)
- 2 Analyze** and **record** transactions using the accounting equation. (p. 101)
- 3 Explain** the nature, format, and purpose of an account. (p. 107)
- 4 Describe** the system of debits and credits and its use in recording transactions. (p. 108)
- 5 Explain** the process of journalizing and posting transactions. (p. 109)
- 6 Describe** the trial balance. (p. 118)



(AC)COUNTING STARS

Many think accountants and movie stars have little in common. At least one night every year, however, they share the stage at the annual Academy Awards. The global accounting firm **PricewaterhouseCoopers** recently celebrated its 76th year counting and verifying the Oscar ballots to determine the Oscar winners.

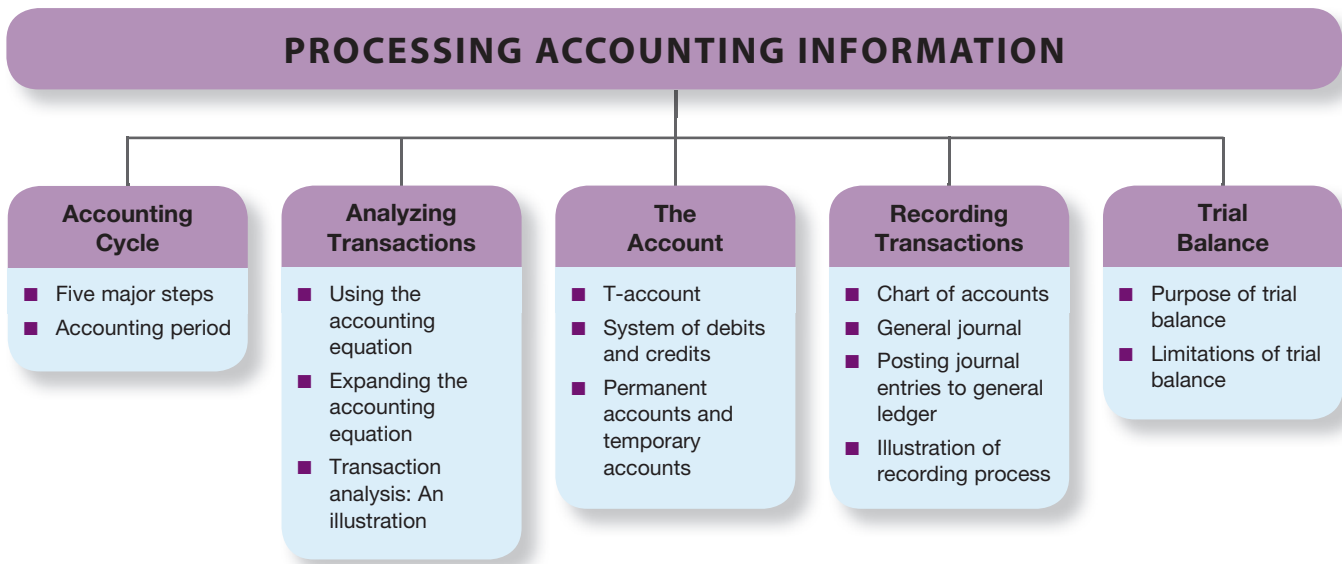
Accounting firms such as PricewaterhouseCoopers, **Ernst and Young**, **KPMG**, and **Deloitte and Touche** have earned a reputation of honesty and ethical conduct—attributes critical to the accounting profession. Many consider ethics the most fundamental principle underlying financial accounting and the independent accounting firms.

The PricewaterhouseCoopers accountants at the Academy Awards work on the project from a top-secret location. One of the accountants involved

explained: “We’re proud of our track record and heritage of hand counting every ballot to deliver the utmost level of accuracy and reliability to the Academy.”

Although all accounting work is not as glamorous as controlling Oscar ballots, that work is crucial to a successful, global capital market. Businesses as varied as **Disney**, **Lowe’s**, **Google**, and **McDonald’s** all require financial statements for making good business decisions.

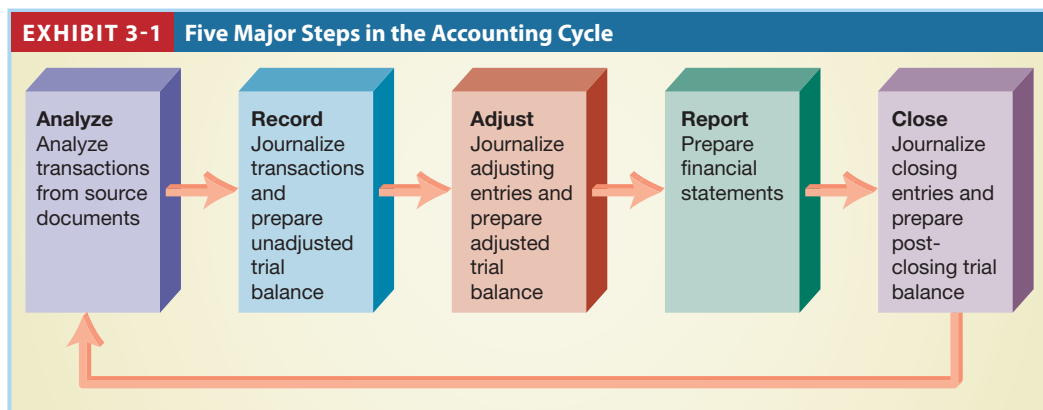
This chapter describes the details of the accounting system of debits and credits. That system is applied throughout the world in all business settings. This chapter also explains the process of journalizing and posting transactions so that financial statements can be prepared for both internal and external users of accounting information.



ACCOUNTING CYCLE

LEARNING OBJECTIVE 1
Identify the five major steps in the accounting cycle.

Businesses engage in economic activities. The role of accounting is to analyze these activities for their impact on a company’s accounting equation, and then enter the results of that analysis in the company’s accounting system. When a company’s management team needs financial data for decision-making purposes and for reports to external parties, the company’s financial statements are prepared and communicated. At the end of the accounting period, the “books are closed,” a process that prepares the accounting records for the next accounting period. The accounting activities described constitute major steps in the **accounting cycle**—a sequence of activities undertaken by accountants to accumulate and report the financial information of a business. Stated succinctly, these steps are analyze, record, adjust, report, and close. Exhibit 3-1 shows the sequence of the major steps in the accounting cycle.



The five steps in the accounting cycle do not occur with equal frequency. A business analyzes and records financial transactions daily during the accounting period. It adjusts and

reports accumulated financial data whenever management needs financial information, usually at weekly, monthly, or quarterly intervals, but at least annually. Closing the books occurs just once, at the end of the accounting period. This chapter focuses on the first two steps of the accounting cycle—analyze and record. In Chapter Four, we examine the final three steps of the cycle.

It is important to know that the steps in the accounting cycle are undertaken whether a business uses a manual accounting system or a computer-based system. This chapter explains the accounting cycle using a manual system for WebWork, a Website development and consulting business launched on December 1, 2011.

ACCOUNTING IN PRACTICE Accounting Periods

The annual accounting period is known as a **fiscal year**. Businesses with fiscal year-ends on December 31, are said to be on a **calendar year**. About 60 percent of U.S. businesses are on a calendar year. Many companies prefer to have their accounting year coincide with their “natural” year—that is, at a point in time when business activity is at a low point. For example, many retailers conclude their fiscal year when inventory quantities are low and easier to count, as year-end accounting procedures are more efficiently accomplished when there is less inventory. The “natural” year does not necessarily coincide with the calendar year. For example, **Gap**, a retailer, ends its fiscal year on the Friday nearest January 31. The company’s busiest period is November through January, when its customers are holiday shopping. Similarly, the **Boston Celtics**, a professional basketball team, concludes its fiscal year on June 30, following completion of the NBA finals.

ANALYZING TRANSACTIONS

Many companies utilize a computer-based accounting system to record their financial transactions. You may have some personal experience using accounting software programs like QuickBooks by **Intuit**. While these computer-based accounting systems are not as sophisticated as the systems used by major corporations, they work in much the same way. Similarly, manual systems might lack the sophistication of large accounting systems utilized by companies like **Ford Motor Company**, but the basic process remains the same.

The accounting equation is written as:

$$\text{Assets} = \text{Liabilities} + \text{Stockholders' equity}$$

This accounting equation provides a convenient way to analyze and summarize a company’s financial transactions and data. The first step in the accounting cycle—analyze—is to determine just what information (if any) must be recorded in a company’s accounting records. Recall from Chapter 2 that only items that can be expressed in monetary terms are recorded in financial statements. For example, the payment of wages to Steve Jobs, the CEO of **Apple**, is recorded because it can be expressed in monetary terms.

An **accounting transaction** is an economic event that must be recorded in the company’s accounting records. In general, any event that affects any of the elements of the accounting equation—assets, liabilities, or stockholders’ equity—must be recorded in a company’s accounting records. Some activities—for example, ordering supplies, bidding on a contract, or negotiating the purchase of an asset—may represent a business activity, but an accounting transaction does not occur until such activities result in a change in one or more amounts of an asset, liability, or stockholders’ equity.

An accounting transaction impacts the accounting equation. However, that equation always remains in balance and at least two elements of the equation are always affected. This is where the term **double-entry accounting** comes from. For example, if an asset account such as Cash is increased, one of the following financial events must also occur to keep the accounting equation in balance:

LEARNING OBJECTIVE 2

Analyze and record transactions using the accounting equation.

- Another asset, such as accounts receivable, must decrease; or
- A liability, such as notes payable, must increase; or
- Stockholders' equity, such as sales revenue, must increase.

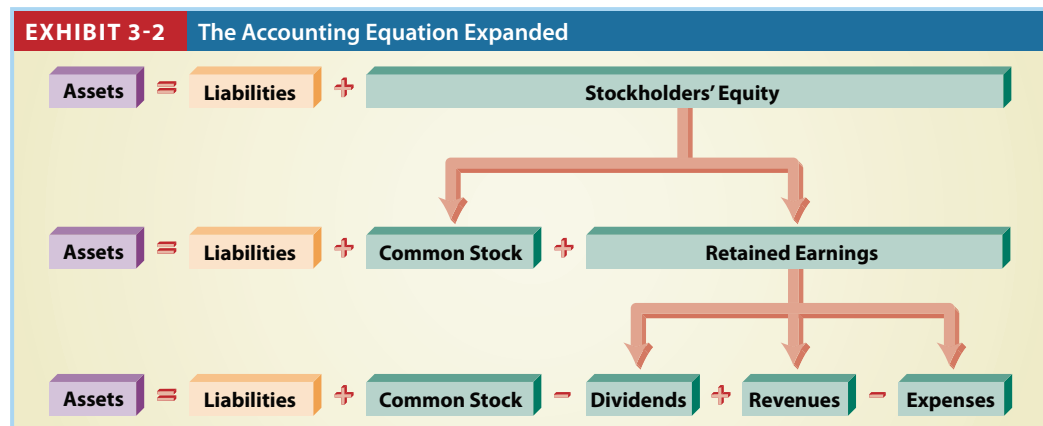


IFRS ALERT!

Both the FASB in the United States and the FASB's international counterpart, the IASB, are working hard to "harmonize" remaining differences between U.S. GAAP and IFRS. One area that these organizations do not need to worry about is how double-entry accounting works. The same process that is described in this chapter, and uses debits and credits, is universally followed.

ACCOUNTING EQUATION EXPANDED

Stockholders' equity has two components—the amount invested by stockholders (common stock) and the cumulative net income of the business that has not yet been distributed to stockholders as a dividend (retained earnings). Common stock is increased when the company issues shares of stock, and retained earnings is increased by a company's net income (or decreased by a net loss) and decreased by a company's payment of dividends. Incorporating these two components into stockholders' equity, the *expanded accounting equation* is illustrated in Exhibit 3-2.



TRANSACTIONS AND THE ACCOUNTING EQUATION: AN ILLUSTRATION

The financial statements of WebWork were introduced in Chapter 1. We return to WebWork to illustrate how its various economic activities and events led to those financial statements.

Steve Gates first established WebWork on December 1, 2011. The company's transactions for December, the first month of operations, are analyzed on the following pages. The accounting equation for WebWork is shown after each transaction so that the financial effects of each transaction can be examined. The accounting equation remains in balance following each transaction. This is not a coincidence; it is the result of the fundamental structure of the accounting system.

The following pages illustrate eleven transactions that occurred during December 2011, at WebWork. Avoid the temptation to skip any of these transactions because each transaction is included to illustrate a particular concept or approach to recording an economic event utilizing the accounting equation.

Transaction 1. Issued Stock

On December 1, 2011, Steve Gates invested \$30,000 cash in exchange for the company's common stock. This transaction increased the company's assets (Cash) by \$30,000 and

increased its stockholders' equity (Common Stock) by \$30,000, as illustrated below using the accounting equation. (For each transaction that impacts equity, we add a brief description—in this case "Issued stock.")

Assets		=	Liabilities	+	Stockholders' Equity
Cash		=			Common Stock
(1) +30,000		=			+30,000 <small>Issued stock</small>
\$30,000		=			\$30,000

It is important to verify the equality of the accounting equation following each transaction. After the above transaction is recorded, both sides of the equation total \$30,000.

Transaction 2. Paid Rent in Advance

On December 1, WebWork prepaid its office rent for the next six months, December 2011 through May 2012. WebWork's rent is \$1,800 per month; meaning it paid a total of \$10,800 cash ($6 \times \$1,800$). This transaction decreased Cash by \$10,800 and increased Prepaid Rent by \$10,800.

Assets		=	Liabilities	+	Stockholders' Equity
Cash	+ Prepaid Rent	=			Common Stock
30,000					30,000
(2) -10,800	+10,800				
19,200	+ 10,800				30,000
\$30,000		=			\$30,000

The expenditure for prepaid rent is recorded as an asset because the advance payment is a future economic benefit to the company. This outlay of cash has value to the business beyond the current accounting period, but any rent that is used up in the current accounting period will be recorded as an expense for the month of December.

Transaction 3. Purchased Office Supplies on Account

On December 1, WebWork purchased office supplies on account totaling \$2,850. Businesses often extend credit to their customers. Credit allows businesses to pay for goods or services at a later date. When credit is used to purchase goods or services, the purchase is said to be made *on account*. This transaction increased Office Supplies by \$2,850 and it increased Accounts Payable by the same amount.

Assets			=	Liabilities	+	Stockholders' Equity
Cash	+ Office Supplies	+ Prepaid Rent	=	Accounts Payable	+	Common Stock
19,200		10,800				30,000
(3) 19,200	+2,850			+2,850		
19,200	+ 2,850	+10,800	=	2,850	+	30,000
\$32,850			=	\$32,850		

Office supplies are recorded as an asset because they are expected to be used by the business in future periods beyond the current accounting period. Any supplies that are used up in the current accounting period will be recorded as an expense for the month of December. Following the purchase of office supplies, its assets total \$32,850, which is equal to the sum of total liabilities (\$2,850) plus stockholders' equity (\$30,000).

Transaction 4. Signed Bank Note in Exchange For Cash

On December 1, WebWork obtained a two-year bank loan in the amount of \$36,000, after signing a note payable. Annual interest charges on the note amount to 10 percent and are due each November 30. As a consequence of this loan, the company’s Cash account increased by \$36,000 and the Notes Payable account, a liability, is increased by \$36,000.

Assets				=	Liabilities		+	Stockholders' Equity		
Cash	+	Office Supplies	+	Prepaid Rent	=	Accounts Payable	+	Notes Payable	+	Common Stock
19,200		2,850		10,800	=	2,850				30,000
(4) +36,000					=			+36,000		
55,200	+	2,850	+	10,800	=	2,850	+	36,000	+	30,000
\$68,850						\$68,850				

Transaction 5. Purchased Equipment With Cash

On December 2, WebWork used cash to purchase office equipment costing \$32,400. This transaction decreased Cash by \$32,400 and it increased Office Equipment by the same amount. The accounting equation remains in balance because an equal amount (\$32,400) is both added to and subtracted from total assets.

Assets					=	Liabilities		+	Stockholders' Equity			
Cash	+	Office Supplies	+	Prepaid Rent	+	Equipment	=	Accounts Payable	+	Notes Payable	+	Common Stock
55,200		2,850		10,800			=	2,850		36,000		30,000
(5) -32,400						+32,400	=					
22,800	+	2,850	+	10,800	+	32,400	=	2,850	+	36,000	+	30,000
\$68,850						\$68,850						

Transaction 6. Received Customer Prepayment

On December 5, WebWork received a prepayment in the amount of \$3,000 for services to be performed over the next few months. Because WebWork has not yet performed the services, and following the revenue recognition principle discussed in Chapter 2, it does not record the \$3,000 payment as revenue. Instead, a liability account, **Unearned Revenue**, is increased by \$3,000, and the company’s Cash account is increased by \$3,000. Unearned revenue is a liability because the company accepted payment for goods or services that have not yet been provided and, therefore, the amount cannot be recorded as earned revenue.

A.K.A. Unearned revenue is also called *deferred revenue*.

Assets					=	Liabilities			+	Stockholders' Equity				
Cash	+	Office Supplies	+	Prepaid Rent	+	Equipment	=	Accounts Payable	+	Unearned Revenue	+	Notes Payable	+	Common Stock
22,800		2,850		10,800		32,400	=	2,850				36,000		30,000
(6) +3,000							=			+3,000				
25,800	+	2,850	+	10,800	+	32,400	=	2,850	+	3,000	+	36,000	+	30,000
\$71,850						\$71,850								

Transaction 7. Provided Services for Customers

On December 6, WebWork performed services for several customers and it was paid \$13,510 cash. This transaction increased Cash by \$13,510 and it increased Fees Revenue by the same amount.

Assets					=	Liabilities			+	Stockholders' Equity			
Cash	Office Supplies	Prepaid Rent	Equipment		=	Accounts Payable	Unearned Revenue	Notes Payable	+	Common Stock	Retained Earnings		
											Rev.	Exp.	Div.
25,800	2,850	10,800	32,400		=	2,850	3,000	36,000	+	30,000			
(7) +13,510											+13,510		
39,310	2,850	10,800	32,400		=	2,850	3,000	36,000	+	30,000	+	13,510	
\$85,360						\$85,360							

Fee revenue

Transaction 8. Performed Services for Both Cash and on Account

On December 8, WebWork performed \$4,740 of services and received \$1,000 in cash with the remaining \$3,740 to be paid to WebWork by customers within 90 days. Businesses often extend credit to customers, allowing them to pay for goods or services at a later date. Under accrual accounting, revenue must be recorded when earned regardless of when payment is received. Consequently, this transaction increased Cash by \$1,000, it increased Accounts Receivable by \$3,740, and it increased Fees Revenue by \$4,740. The accounting equation remains in balance because both sides of the equation are increased by \$4,740.

A.K.A. Delivering goods or services in advance of payment is referred to as providing goods or services "on account" or "on credit."

Assets					=	Liabilities			+	Stockholders' Equity			
Cash	Accounts Receivable	Office Supplies	Prepaid Rent	Equipment	=	Accounts Payable	Unearned Revenue	Notes Payable	+	Common Stock	Retained Earnings		
											Rev.	Exp.	Div.
39,310		2,850	10,800	32,400	=	2,850	3,000	36,000	+	30,000	13,510		
(8) +1,000	+3,740										+4,740		
40,310	3,740	2,850	10,800	32,400	=	2,850	3,000	36,000	+	30,000	+	18,250	
\$90,100						\$90,100							

Fee revenue

Non-Accounting Transaction. Hired an Employee

On December 9, WebWork hired an employee to provide administrative help in the office. The employee will be paid \$1,620 every two weeks and begins work Monday, December 12. At the time the employee is hired there is no immediate financial effect on the assets, liabilities, or stockholders' equity of the company. There is only an employment agreement between the employee and the company. The employee has not yet performed any work, nor has the employee received any wages.

Transaction 9. Paid Employee Wages

On December 23, WebWork paid the employee after she completed her first two weeks on the job. This transaction decreased Cash by \$1,620, and it increased Wage Expense by \$1,620. By definition, an increase in expenses decreases stockholders' equity.

Assets					=	Liabilities			+	Stockholders' Equity			
Cash	Accounts Receivable	Office Supplies	Prepaid Rent	Equipment	=	Accounts Payable	Unearned Revenue	Notes Payable	+	Common Stock	Retained Earnings		
											Rev.	Exp.	Div.
40,310	3,740	2,850	10,800	32,400	=	2,850	3,000	36,000	+	30,000	18,250		
(9) -1,620												-1,620	
38,690	3,740	2,850	10,800	32,400	=	2,850	3,000	36,000	+	30,000	+	18,250	- 1,620
\$88,480						\$88,480							

Wage expense

Transaction 10. Received Payment on Account from Customer

On December 27, WebWork received a payment of \$2,400 cash from a customer that had previously received services performed on account (see Transaction 8). This transaction increased Cash by \$2,400, and decreased Accounts Receivable by \$2,400.

Assets					=	Liabilities			+	Stockholders' Equity			
Cash	Accounts Receivable	Office Supplies	Prepaid Rent	Equipment	=	Accounts Payable	Unearned Revenue	Notes Payable	+	Common Stock	Retained Earnings		
											Rev.	Exp.	Div.
38,690	3,740	2,850	10,800	32,400	=	2,850	3,000	36,000	+	30,000	18,250	1,620	
(10) +2,400	-2,400												
41,090	1,340	2,850	10,800	32,400	=	2,850	3,000	36,000	+	30,000	+	18,250	- 1,620
\$88,480						\$88,480							

The balance in Accounts Receivable becomes \$1,340. This represents the amount still owed to WebWork for services that were previously performed on account but remain unpaid.

Transaction 11. Paid Cash Dividend

On December 30, WebWork paid a cash dividend. Dividends are not a business expense, and are not included in the calculation of net income. Rather, dividends are a distribution of the company’s accumulated net income to its stockholders. Payment of the dividend decreases Cash by \$500 and increases Dividends by \$500. (By definition, an increase in dividends causes a decrease in stockholders’ equity.)

Assets					=	Liabilities			+	Stockholders' Equity												
Cash	+	Accounts Receivable	+	Office Supplies	+	Prepaid Rent	+	Equipment	=	Accounts Payable	+	Unearned Revenue	+	Notes Payable	+	Common Stock	+	Retained Earnings				
																		Rev.	-	Exp.	-	Div.
41,090		1,340		2,850		10,800		32,400	=	2,850		3,000		36,000		30,000		18,250		1,620		
(11) -500									=													-500
40,590	+	1,340	+	2,850	+	10,800	+	32,400	=	2,850	+	3,000	+	36,000	+	30,000	+	18,250	-	1,620	-	500
\$87,980									\$87,980													

TRANSACTION SUMMARY

Exhibit 3-3 provides a summary of the eleven accounting transactions for WebWork, for the month of December. The exhibit illustrates the financial effect of each transaction using the accounting equation. It is important that the accounting equation remains in balance at all times, and that the equality between total assets and the sum of total liabilities and stockholders’ equity is maintained following each transaction.

EXHIBIT 3-3 Summary of December Business Transactions and Their Effect on the Expanded Accounting Equation																						
Assets					=	Liabilities			+	Stockholders' Equity												
Cash	+	Accounts Receivable	+	Office Supplies	+	Prepaid Rent	+	Equipment	=	Accounts Payable	+	Unearned Revenue	+	Notes Payable	+	Common Stock	+	Retained Earnings				
																		Rev.	-	Exp.	-	Div.
(1) +30,000									=							+30,000						
(2) -10,800						+10,800			=													
(3)				+2,850					=	+2,850												
(4) +36,000									=					+36,000								
(5) -32,400								+32,400	=													
(6) +3,000									=			+3,000										
(7) +13,510									=									+13,510				
(8) +1,000		+3,740							=									+4,740				
(9) -1,620									=											-1,620		
(10) +2,400		-2,400							=													
(11) -500									=													-500
40,590	+	1,340	+	2,850	+	10,800	+	32,400	=	2,850	+	3,000	+	36,000	+	30,000	+	18,250	-	1,620	-	500
\$87,980									\$87,980													

	Concept	Method	Assessment
TAKEAWAY 3.1	When should an event be recorded in a company's accounting records?	Review the event details. Does the event affect the company's assets, liabilities, or stockholders' equity?	If the event affects any of the elements of the accounting equation, it must be recorded in a company's accounting records.

Your Turn! **3.1**

Ford Aerobics Studio, Inc., operates as a corporation. The firm rents studio space (including a sound system) and specializes in offering aerobics classes to individuals and groups. On January 1, the

assets, liabilities, and stockholders' equity of the business were as follows: Cash, \$5,000; Accounts Receivable, \$5,200; Notes Payable, \$2,500; Accounts Payable, \$1,000; Common Stock, \$5,500; and Retained Earnings, \$1,200. The January business activities for the studio were as follows:

- (1) Paid \$600 cash on accounts payable.
- (2) Paid January rent of \$3,600 cash.
- (3) Billed clients for January classes in the amount of \$11,500.
- (4) Received a \$500 invoice from a supplier for T-shirts given free to January's class members as an advertising promotion.
- (5) Collected \$10,000 cash on account from clients for prior aerobics classes.
- (6) Paid employee wages of \$2,400 cash.
- (7) Received a \$680 invoice for January's utilities.
- (8) Paid \$20 cash to the bank as January interest on an outstanding note payable.
- (9) Paid \$900 cash in dividends to stockholders.
- (10) Paid \$4,000 cash on January 31 to purchase a sound system to replace the rented system.

Required

- a. Set up an expanded accounting equation in columnar form with the following individual assets, liabilities, and stockholders' equity accounts: Cash, Accounts Receivable, Equipment, Notes Payable, Accounts Payable, Common Stock, and Retained Earnings. Enter the January 1 balances below each account. (The beginning balance in the Equipment account is \$0.)
- b. Record the financial impact (increase or decrease) of each transaction (1) through (10) on the beginning account balances. Then total the columns to demonstrate that total assets equal the sum of total liabilities plus stockholders' equity as of January 31.

The solution is on page 155.

THE "ACCOUNT" SYSTEM

The basic component of an accounting system is the **account**, which is an individual record of the increases and decreases in a specific asset, liability, or stockholders' equity item. An account is created for each individual asset, liability, and stockholders' equity item on a company's financial statements. Some common account titles are Cash, Accounts Receivable, Notes Payable, Fees Revenue, and Rent Expense.

LEARNING OBJECTIVE 3

Explain the nature, format, and purpose of an account.

T-ACCOUNT

A **T-account** is a simplified form of an account. T-accounts are so named because they resemble the letter "T." A T-account with the December changes in the Cash account for WebWork is presented in Exhibit 3-4.

EXHIBIT 3-4 Cash T-account

Cash			
(1)	30,000	10,800	(2)
(4)	36,000	32,400	(5)
(6)	3,000	1,620	(9)
(7)	13,510	500	(11)
(8)	1,000		
(10)	2,400		
Bal.	40,590		

A T-accounts consists of: (1) the account title (such as Cash), (2) amounts reflecting increases and decreases, and (3) cross-references to other accounting records. It is customary to reference (or link) the data entries in a T-account with a number or a letter to identify the related accounting transaction that originated the data. This permits a systematic review of the data entries in the event of a recording error. It also enables a company,

and its independent auditor, to review the company's set of accounts and match the account information with the related accounting transactions. The numerical references in the Cash T-account are the ones used to identify the December transactions for WebWork from Exhibit 3-3.

CORPORATE SOCIAL RESPONSIBILITY What to Record?

An important element of the conceptual framework discussed in Chapter 2 is the monetary unit concept, which states that only those items that can be expressed in monetary terms are reported in financial statements. This causes many items of interest to be excluded from financial statements. Reporting of a company's social responsibility activities, for example, would be compromised if it were constrained to the activities that can be expressed in monetary terms. Reporting guidelines established by the Global Reporting Initiative, the organization that pioneered the world's most widely-used sustainability reporting framework, allow for a wider range of activities to be measured and reported. For example, **The Bayer Group**, a global healthcare company, reports such items as greenhouse emissions, net water usage, and employee safety records in its annual sustainable development report. Bayer's sustainability report can be found at the Bayer Website.

SYSTEM OF DEBITS AND CREDITS

LEARNING OBJECTIVE 4

Describe the system of debits and credits and its use in recording transactions.

One basic characteristic of all accounts is that data entries separately record the increases and decreases to an account. In some accounts, such as the Cash account in Exhibit 3-4, increases are recorded on the left side of the account and decreases are recorded on the right side. In other accounts, the reverse is true. The method of recording data entries in the accounts is a matter of convention; that is, a simple set of rules is followed, which involves debits and credits.

The terms **debit** and **credit** are used to refer to the left side and the right side, respectively, of an account as shown below:

(Any Type of Account)	
Debit	Credit
Always the left side	Always the right side

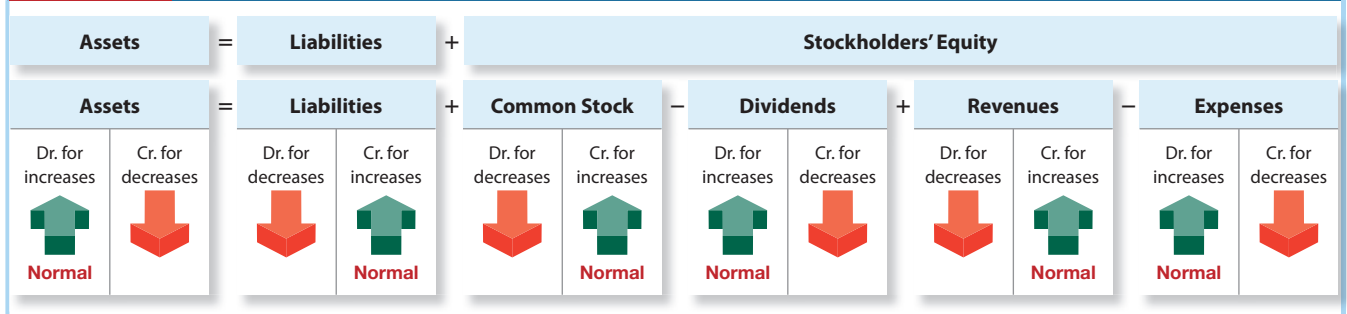
Regardless of what amount is recorded in an account, a data entry made on the left side is a debit to the account; and, a data entry recorded on the right side is a credit to the account. The words *debit* and *credit* are abbreviated *dr.* (from the Latin *debere*) and *cr.* (from the Latin *credere*), respectively.

The system of debits and credits identifies which accounts are increased by debits (or by credits) and which accounts are decreased by debits (or by credits). Exhibit 3-5 summarizes these rules for each of the six primary categories of accounts: assets, liabilities, common stock, dividends, revenues, and expenses. Observe the following relations in Exhibit 3-5:

1. *Debit* always refers to the left side of an account; *credit* always refers to the right side.
2. Increases in asset, dividend, and expense accounts are debit entries. Increases in liability, common stock, and revenue accounts are credit entries.
3. Decreases in asset, dividend, and expense accounts are credit entries. Decreases in liability, common stock, and revenue accounts are debit entries.
4. The **normal balance** of an account is the side on which increases to the account are recorded. Thus, asset, dividend, and expense accounts normally have debit balances, whereas liabilities, common stock, and revenue accounts normally have credit balances. This is because increases in an account are usually greater than, or equal to, the decreases to an account.

The pattern of increases and decreases for asset accounts is opposite that for liability, common stock, and revenue accounts. The pattern of increases and decreases for revenue

Hint: A "Retained Earnings" account would be included in Exhibit 3-5 for a continuing business that has not paid out its income with dividends. That account would have increases on the right and decreases on the left.

EXHIBIT 3-5 System of Increases and Decreases, Debits and Credits, and Normal Balances

accounts is to be expected because revenue is a temporary subdivision of stockholders' equity. Following the same logic, the pattern of increases and decreases for dividends and expenses is opposite that because dividends and expenses reduce stockholders' equity.

PERMANENT AND TEMPORARY ACCOUNTS

Each account is classified as either a permanent account or a temporary account. The **permanent accounts** are the accounts presented in the balance sheet. They consist of accounts for assets, liabilities, common stock, and retained earnings. The distinguishing feature of a permanent account is that any balance in the account at the end of an accounting period is *carried forward* to the next accounting period. Accounts for revenues, expenses, and dividends are temporary subdivisions of stockholders' equity. These accounts are temporary accounts. **Temporary accounts** are used to gather information for a particular accounting period; at the end of the accounting period, temporary account balances are transferred to a permanent stockholders' equity account. The procedures used to transfer temporary account balances to a permanent stockholders' equity account are explained in Chapter 4.

Permanent Accounts	Temporary Accounts
Assets	Revenues
Liabilities	Expenses
Common Stock	Dividends
Retained Earnings	Income Summary

Your Turn!

3.2

For each of the following accounts, identify whether the account's normal balance is a debit or a credit and whether the account is permanent or temporary.

- | | |
|------------------|------------------|
| a. Cash | e. Dividends |
| b. Common stock | f. Sales revenue |
| c. Wage expense | g. Inventory |
| d. Notes payable | |

The solution is on page 155.

RECORDING TRANSACTIONS

Earlier in this chapter we analyzed the transactions of WebWork using the accounting equation. This approach enabled us to see how accounting transactions affect a company's financial position and operations. This approach is not feasible, however, for even a modest-sized business because of the large number of transactions. Consequently, we now explain the process of analyzing and recording accounting information in an actual accounting system.

LEARNING OBJECTIVE 5

Explain the process of journalizing and post-ing transactions.

An initial step in the analysis and recording process is to identify evidence of a business transaction. This usually comes in the form of a source document. **Source documents** are printed forms or computer records that are generated when a firm engages in a business transaction. At a minimum, a source document usually specifies the dollar amount involved, the date of the transaction, and possibly the party dealing with the firm. Some examples of source documents include (1) a supplier's invoice showing evidence of a purchase of supplies on account, (2) a bank check indicating the payment of an obligation, (3) a deposit slip showing the amount of cash deposited in a bank, and (4) a cash receipt indicating the amount of cash received from a customer for services rendered. One example follows. Regardless of its form, the source document serves as the basis for the analysis of the underlying business event.

WebWork, Inc.		INVOICE	
137 Technology Lane Irvine, CA. 92614 Phone (949) 727-3555		INVOICE # [100] DATE: DECEMBER 10, 2011	
TO: Pick Enterprises 1055 Kinrose Ave Los Angeles, CA 90024 (310) 208-5570	FOR: Web design		
DESCRIPTION	HOURS	RATE	AMOUNT
Design work for Website, including motion graphics	17.5	\$125	\$2,187.50
TOTAL			\$2,187.50
Make all checks payable to WebWork, Inc. Total due in 15 days. Overdue accounts subject to a service charge of 1% per month.			
Thank you for your business!			

A.K.A. A company's journals are also referred to as its "books."

A.K.A. Another term often used to describe the recording of a transaction is to "book" the transaction.

Once the source document has been analyzed to determine the accounts affected and the amounts involved, we then record the transaction. All accounting transactions are initially recorded in a journal. A **journal**, or *book of original entry*, is a tabular record in which a business's activities are reflected in terms of debits and credits and recorded in chronological order. A journal organizes information by date, and thus, serves as a chronological diary of a company's business activities. The word *journalize* means to record a transaction in a journal; and, an entry in a journal is called a **journal entry**.

CHART OF ACCOUNTS

Businesses maintain a chart of accounts to facilitate the analysis of a company's business activities and to assist in the preparation of journal entries. A **chart of accounts** is a list of the titles of all accounts in a business's accounting system. Account titles are grouped by, and in the order of, the five major components of the expanded accounting equation: assets, liabilities, stockholders' equity, revenues, and expenses. Exhibit 3-6 shows the chart of accounts for WebWork and indicates the account numbers that will be used throughout this illustration. Temporary accounts are outlined by a red dashed box. (Each company maintains its own unique set of accounts and its own numbering system.)

GENERAL JOURNAL

The **general journal** is a record with enough flexibility that any type of business transaction can be recorded in it. Like all journals in an accounting system, the general journal is a book of original entry in which accounting data are entered into a company's accounting system.

system called the general ledger. This transfer of data from the general journal to a company's general ledger is undertaken to facilitate the preparation of the company's financial statements. Although businesses can use various ledgers to accumulate detailed accounting information, all firms have a general ledger. A **general ledger** is a listing of each account of a company and the amounts making up each account.

The process of transferring the debit and credit information from the general journal to the general ledger is called **posting**. It is important to be able to trace each data entry appearing in a general ledger account to the general journal location from which it was posted; consequently, both the general journal and general ledger accounts have a **posting reference** code. The posting reference of the general journal indicates the account to which the related debit or credit has been posted. The posting references in the general journal and ledger accounts are entered when the journal entries are posted to the ledger accounts (automatically when computerized, or by hand for a manual system).

ILLUSTRATION OF THE RECORDING PROCESS

We now apply the recording process to the transactions of WebWork, Inc., that were summarized in Exhibit 3-3. For each transaction, we (1) **analyze** the transaction using the accounting equation, (2) **journalize** the transaction, and (3) **post** journal entries to the general ledger (for simplicity, we use the T-account structure for each ledger account).

Transaction 1 Issued Stock

On December 1, Steve Gates invested \$30,000 in exchange for common stock of WebWork, Inc.

ANALYZE

Assets		=	Liabilities		+	Stockholders' Equity	
+30,000		=				+30,000	
Cash						Common Stock	

JOURNALIZE

Dec. 1 | Cash
Common stock
To record issuance of common stock for cash.

POST

Cash		Common Stock	
(1)	30,000	30,000	(1)

Transaction 2 Paid Rent in Advance

On December 1, WebWork prepaid rent for the office covering the next six months, December 2011 through May 2012. Monthly rent is \$1,800; the total amount prepaid was \$10,800 cash.

ANALYZE

Assets		=	Liabilities		+	Stockholders' Equity	
-10,800	+10,800	=					
Cash	Prepaid Rent						

JOURNALIZE

Dec. 1 | Prepaid rent
Cash
To record advance payment of six months' rent.

POST

Prepaid Rent		Cash	
(2)	10,800	10,800	(1)

Transaction 3 Purchased Office Supplies on Account

On December 1, WebWork purchased \$2,850 of office supplies on account.

ANALYZE

Assets		=	Liabilities		+	Stockholders' Equity	
+2,850		=	+2,850				
Office Supplies			Accounts Payable				

JOURNALIZE

Dec. 1 | Office supplies
Accounts payable
To record purchase of office supplies.

POST

Office Supplies		Accounts Payable	
(3)	2,850	2,850	(3)

Transaction 4 Signed Bank Note in Exchange for Cash

On December 1, WebWork obtained a two-year bank loan for \$36,000, signing a note payable. Annual interest of 10 percent is due each November 30.

ANALYZE

Assets		=	Liabilities		+	Stockholders' Equity	
+36,000		=	+36,000				
Cash			Notes Payable				

JOURNALIZE

Dec. 1 | Cash
Notes payable
To record borrowing of funds.

POST

Cash		Notes Payable	
(1)	30,000	10,800	(2)
(4)	36,000	36,000	(4)

Transaction 5 Purchased Office Equipment

On December 2, WebWork used cash to purchase \$32,400 of office equipment.

ANALYZE

Assets		=	Liabilities		+	Stockholders' Equity	
-32,400	+32,400	=					
Cash	Office Equipment						

JOURNALIZE

Dec. 2 | Office equipment
Cash
To record purchase of office equipment.

POST

Office Equipment		Cash	
(5)	32,400	(1)	30,000
		(4)	36,000
		10,800	(2)
		32,400	(5)

Transaction 6 Received Customer Prepayment

On December 5, WebWork received \$3,000 cash for services to be performed in the future.

ANALYZE

Assets		=	Liabilities	+	Stockholders' Equity
+3,000		=	+3,000		
Cash		=	Unearned Revenue		

JOURNALIZE

Dec. 5 | Cash
 Unearned revenue
To record advance payment from a customer.

POST

Cash		Unearned Revenue	
(1) 30,000	10,800 (2)		
(4) 36,000	32,400 (5)	3,000	(6)
(6) 3,000			

Transaction 7 Performed Services for Customers

On December 6, WebWork performed services for several customers and was paid \$13,510 cash.

ANALYZE

Assets		=	Liabilities	+	Stockholders' Equity
+13,510		=			+13,510
Cash		=			Fees Revenue

JOURNALIZE

Dec. 6 | Cash
 Fees revenue
To record fee revenue earned.

POST

Cash		Fees Revenue	
(1) 30,000	10,800 (2)		
(4) 36,000	32,400 (5)	13,510	(7)
(6) 3,000			
(7) 13,510			

Transaction 8 Performed Services for Cash and on Account

On December 8, WebWork performed \$4,740 of services for which it received \$1,000 cash with the remaining \$3,740 to be paid in the future.

ANALYZE

Assets		=	Liabilities	+	Stockholders' Equity
+1,000	+3,740	=			+4,740
Cash	Accounts Receivable	=			Fees Revenue

JOURNALIZE

Dec. 8 | Cash
 Accounts receivable
 Fees revenue
To record fee revenue earned.

POST

Cash		Accounts Receivable		Fees Revenue	
(1) 30,000	10,800 (2)	(8) 3,740		13,510	(7)
(4) 36,000	32,400 (5)			4,740	(8)
(6) 3,000					
(7) 13,510					
(8) 1,000					

Transaction 9 Paid Employee Wages

On December 23, WebWork paid its employee \$1,620 cash upon completion of her first two weeks on the job.

ANALYZE

Assets		=	Liabilities	+	Stockholders' Equity
-1,620		=			-1,620
Cash		=			Wage Expense

JOURNALIZE

Dec. 23 | Wage expense
Cash
To record payment of employee wages.

POST

Wage Expense		Cash			
(9)	1,620	(1)	30,000	10,800	(2)
		(4)	36,000	32,400	(5)
		(6)	3,000	1,620	(9)
		(7)	13,510		
		(8)	1,000		

Transaction 10 Received Payment on Account from Customer

On December 27, WebWork received \$2,400 cash from a customer for services previously performed on account.

ANALYZE

Assets		=	Liabilities	+	Stockholders' Equity
+2,400	-2,400	=			
Cash	Accounts Receivable	=			

JOURNALIZE

Dec. 27 | Cash
Accounts receivable
To record receipt of payment on account.

POST

Cash		Accounts Receivable			
(1)	30,000	10,800	(2)	(8)	3,740
(4)	36,000	32,400	(5)		
(6)	3,000	1,620	(9)		
(7)	13,510				
(8)	1,000				
(10)	2,400				

Transaction 11 Paid Cash Dividend

On December 30, WebWork paid a \$500 cash dividend.

ANALYZE

Assets		=	Liabilities	+	Stockholders' Equity
-500		=			-500
Cash		=			Dividends

JOURNALIZE

Dec. 30 | Dividends
Cash
To record payment of cash dividends.

POST

Dividends		Cash			
(11)	500	(1)	30,000	10,800	(2)
		(4)	36,000	32,400	(5)
		(6)	3,000	1,620	(9)
		(7)	13,510	500	(11)
		(8)	1,000		
		(10)	2,400		

SUMMARY ILLUSTRATION OF JOURNALIZING AND POSTING TRANSACTIONS

Exhibit 3-8 presents the general journal for WebWork for the month of December 2011. Also, Exhibit 3-9 presents the general ledger for WebWork as of December 31, 2011. All journal entries appearing in Exhibit 3-8 have been posted to the general ledger accounts in Exhibit 3-9. The accounts in WebWork's general ledger are grouped by category as follows: (1) assets, (2) liabilities, (3) stockholders' equity, (4) dividends, (5) revenues, and (6) expenses. Each general ledger account in Exhibit 3-9 has been totaled with the ending balance appearing in green.

EXHIBIT 3-8		General Journal for WebWork, Inc.		
General Journal				
	Date	Account Titles and Explanation	Debit	Credit
(1)	2011 Dec. 1	Cash Common stock <i>To record issuance of common stock for cash.</i>	30,000	30,000
(2)	1	Prepaid rent Cash <i>To record advance payment of six months' rent.</i>	10,800	10,800
(3)	1	Office supplies Accounts payable <i>To record purchase of office supplies.</i>	2,850	2,850
(4)	1	Cash Notes payable <i>To record a bank loan, with a signed note payable.</i>	36,000	36,000
(5)	2	Office equipment Cash <i>To record purchase of office equipment.</i>	32,400	32,400
(6)	5	Cash Unearned revenue <i>To record a prepayment from a customer.</i>	3,000	3,000
(7)	6	Cash Fees revenue <i>To record fee revenue earned.</i>	13,510	13,510
(8)	8	Cash Accounts receivable Fees revenue <i>To record fee revenue earned.</i>	1,000 3,740	4,740
(9)	23	Wage expense Cash <i>To record payment of employee wages.</i>	1,620	1,620
(10)	27	Cash Accounts receivable <i>To record receipt of payment on account.</i>	2,400	2,400
(11)	30	Dividends Cash <i>To record payment of cash dividends.</i>	500	500

EXHIBIT 3-9 General Ledger for WebWork, Inc.

General Ledger													
Assets				=	Liabilities				+	Stockholders' Equity			
Cash					Accounts Payable					Common Stock			
(1)	30,000	10,800	(2)			2,850	(3)			30,000	(1)		
(4)	36,000	32,400	(5)			2,850	Bal.			30,000	Bal.		
(6)	3,000	1,620	(9)		Unearned Revenue					Dividends			
(7)	13,510	500	(11)						(11)	500			
(8)	1,000					3,000	(6)		Bal.	500			
(10)	2,400					3,000	Bal.		Fees Revenue				
Bal.	40,590				Notes Payable								
											13,510	(7)	
Accounts Receivable											4,740	(8)	
(8)	3,740	2,400	(10)			36,000	(4)				18,250	Bal.	
Bal.	1,340					36,000	Bal.		Wage Expense				
Office Supplies										(9)	1,620		
(3)	2,850								Bal.	1,620			
Bal.	2,850				Prepaid Rent								
Prepaid Rent													
(2)	10,800				Office Equipment								
Bal.	10,800				(5)	32,400							
Office Equipment													
(5)	32,400												
Bal.	32,400												
Assets = \$87,980				=	Liabilities = \$41,850				+	Stockholders' Equity = \$46,130			

Your Turn!**3.3**

For each of the transactions below, complete the following requirements.

- Record the effect of each transaction using the accounting equation.
- Prepare journal entries for each transaction.
- Post the journal entries for each transaction to the appropriate T-accounts.

Transactions:

- The company received \$1,300 cash from clients for services rendered.
- The company paid \$2,400 cash for wages to employees.
- The company collected \$600 cash from clients on account.
- The company paid a \$400 cash dividend.
- The company purchased \$700 of office supplies on account.
- The company billed clients \$900 for services rendered, which were unpaid.
- The company paid \$500 cash to suppliers on account.

The solution is on pages 155–156.

TRIAL BALANCE

LEARNING OBJECTIVE 6

Describe the trial balance.

A **trial balance** is a listing of all accounts from the general ledger with their respective debit or credit balance. A trial balance is prepared at the end of an accounting period after all transactions have been recorded. Exhibit 3-10 shows a trial balance for WebWork, Inc., as of December 31, 2011. The sequence of the accounts and the dollar amounts are taken directly from the general ledger T-accounts in Exhibit 3-9 (which follow the order of the account numbering system). The debit and credit columns from the trial balance are in balance; that is, the \$90,100 sum of the debit account balances equals the \$90,100 sum of the credit account balances.

Two principal reasons for preparing a trial balance are:

1. To serve as an interim check on whether the sum of the debit balances and the sum of the credit balances from the general ledger accounts are equal. If the totals are not equal, it would indicate the presence of some type of recording error.
2. To show all general ledger account balances in one location, which facilitates the preparation of financial statements. The trial balance, however, is *not* a financial statement.

A trial balance must be dated. In Exhibit 3.10, the trial balance of WebWork, Inc., was prepared as of December 31, 2011.

While it is required that a trial balance be in balance—that is, that the total of the debit column equal the total of the credit column—this equality does not guarantee that the accounting data is error-free. Potential data errors could still exist as a consequence of (1) transactions not being journalized, (2) journal entries not being posted, (3) journal entries being posted in the wrong amount, and (4) journal entries being posted to the wrong accounts.

EXHIBIT 3-10 Unadjusted Trial Balance for WebWork, Inc.

WEBWORK, INC. Unadjusted Trial Balance December 31, 2011		
	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	
Fees revenue		18,250
Wage expense	1,620	
Totals	<u>\$90,100</u>	<u>\$90,100</u>

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 its fraudulent accounting, 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.

Your Turn!

3.4

Each of the following accounts from the Devin Company has a normal balance. The balances are as of December 31, 2011, 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 a trial balance for the Devin Company as of December 31, 2011.

The solution is on page 156.

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

TAKEAWAY 3.2

WORKING WITH THE TAKEAWAYS

Part A

Each of the following accounts from the Furst Company has a normal balance as of December 31, 2011, the end of Furst’s first year of operations.

Cash	\$100	Common stock	\$500
Accounts receivable	300	Sales revenue	800
Inventory	250	Selling expenses.....	300
Property, plant, and equipment	750	Administrative expenses.....	50
Accounts payable	150	Dividends	100
Notes payable.....	400		

Required

Prepare a trial balance for Furst Company as of December 31, 2011.

Part B

Lampe Distributors was formed to serve as a distributor of fine furnishings imported from overseas manufacturers. Assume the following trial balance was prepared as of December 31, 2011, at the end of Lampe’s first year of operations:

LAMPE DISTRIBUTORS Unadjusted Trial Balance December 31, 2011		
	Debit	Credit
Cash	\$ 23,000	
Accounts receivable	4,500	
Buildings.....	72,000	
Equipment	20,500	
Inventory	38,000	
Accounts payable		\$ 5,500
Notes payable.....		47,750
Common stock		42,000
Sales revenue		280,250
Wage expense.....	100,000	
Selling expenses.....	31,000	
Rent expense.....	23,000	
Administrative expenses.....	15,750	
Tax expense.....	23,000	
Dividends	6,000	
Totals	<u>\$356,750</u>	<u>\$375,500</u>

It is apparent that there is an error somewhere in the company’s accounts since the sum of the debit account balances (\$356,750) does not equal the sum of the credit account balances (\$375,500). After further research, we learn the following:

1. A cash purchase of \$20,000 in inventory, occurring near year-end, was not recorded.
2. By mistake, \$5,000 that should have been recorded as Accounts Payable was recorded as Notes Payable.
3. A credit of \$26,000 was accidentally recorded in the Wage Expense account rather than in Sales Revenue.
4. A sale on account of \$18,750 was correctly recorded as Sales Revenue, but the other side of the entry was mistakenly never recorded.

Required

- a. Which of the four errors, if any, is the reason that the trial balance is not in balance? Explain.
- b. Which of the errors, if any, must be corrected?
- c. Prepare a corrected trial balance.

Solution

Part A

FURST COMPANY Trial Balance December 31, 2011		
	Debit	Credit
Cash	\$ 100	
Accounts receivable	300	
Inventory	250	
Property, plant, and equipment	750	
Accounts payable		\$ 150
Notes payable		400
Common stock		500
Dividends	100	
Sales revenue		800
Selling expenses	300	
Administrative expenses	50	
Totals	<u>\$1,850</u>	<u>\$1,850</u>

Part B

- a. Only item #4 caused the trial balance to be out of balance.
- b. All of the items are errors, and therefore, all of the errors should be corrected. Just because a trial balance is in balance does not imply that the accounting data is free of recording errors. Each of the four items is an error that will cause incorrect financial statements to be prepared if the errors are not corrected.
- c.

LAMPE DISTRIBUTORS Trial Balance December 31, 2011		
	Debit	Credit
Cash	\$ 3,000	
Accounts receivable	23,250	
Buildings	72,000	
Equipment	20,500	
Inventory	58,000	
Accounts payable		\$ 10,500
Notes payable		42,750
Common stock		42,000
Sales revenue		306,250
Wage expense	126,000	
Selling expenses	31,000	
Rent expense	23,000	
Administrative expenses	15,750	
Tax expense	23,000	
Dividends	6,000	
	<u>\$401,500</u>	<u>\$401,500</u>

SUMMARY OF LEARNING OBJECTIVES

Identify the five major steps in the accounting cycle. (p. 100)

LO1

- Five major steps in the accounting cycle are:
 1. Analyze.
 2. Record.
 3. Adjust.
 4. Report.
 5. Close.

Analyze and record transactions using the accounting equation. (p. 101)

LO2

- The accounting equation provides a convenient way to summarize the recording of financial information.
- An initial step in the accounting process—analyze—is to determine just which transactions (if any) need to be recorded.
- An *accounting transaction* is an economic event that requires accounting recognition. An event that affects any of the elements of the basic accounting equation (assets, liabilities, or stockholders' equity) must be recorded.

Explain the nature, format, and purpose of an account. (p. 107)

LO3

- An account is an individual record of the increases and decreases in specific assets, liabilities, permanent stockholders' equity, dividends, revenues, or expenses.
- Information provided by the account includes its title, amounts reflecting increases and decreases, cross-references to other accounting records, and dates and descriptive notations.
- Permanent accounts are the balance sheet accounts—assets, liabilities, and stockholders' equity; any balance in a permanent account at the end of an accounting period is carried forward to the following period.
- Temporary accounts consist of revenue, expense, and dividend accounts; these accounts gather information for an accounting period, but these account balances are not carried forward into the next accounting period.

Describe the system of debits and credits and its use in recording transactions. (p. 108)

LO4

- The left side of an account is always the debit side; the right side of an account is always the credit side.
- Increases in assets, dividends, and expenses are debit entries; increases in liabilities, permanent stockholders' equity, and revenues are credit entries. Decreases are the opposite.
- The normal balance of any account appears on the account side used for recording account increases.
- Each accounting transaction should be analyzed into equal amounts of debits and credits.
- All accounting transactions are analyzed using one or more of the basic account categories: (1) assets, (2) liabilities, (3) common stock, (4) dividends, (5) revenues, and (6) expenses. Retained earnings can also be included here.

Explain the process of journalizing and posting transactions. (p. 109)

LO5

- Source documents provide the basis for analyzing business transactions.
- Accounting entries are initially recorded in a journal in chronological order; the journal is a book of original entry and acts like a diary of a business's activities.
- A general ledger is a grouping of all of the accounts that are used to prepare the basic financial statements.
- Posting is the transfer of information from a journal to the general ledger accounts.
- Posting references are used to cross-reference the information in journals and the general ledger accounts.

Describe the trial balance. (p. 118)

LO6

- A trial balance is a list of the accounts in the general ledger with their respective debit or credit balance. A trial balance is prepared after all transactions have been recorded for an accounting period.
- A trial balance serves as a mechanical check to evaluate the equality of the sum of the debit account balances and the sum of the credit account balances.
- A trial balance facilitates the preparation of the financial statements by showing all account balances in one concise record.

TAKEAWAYS: SUMMARY CHART

	Concept	Method	Assessment
TAKEAWAY 3.1	When should an event be recorded in a company's accounting records?	Review the event details. Does the event affect the company's assets, liabilities, or stockholders' equity?	If the event affects any of the elements of the accounting equation, it must be recorded in a company's accounting records.
TAKEAWAY 3.2	Is the trial balance in balance?	Ending balances for all of the general ledger accounts entered on the trial balance. Total the debit column and the credit column on the trial balance.	Verify the equality of the sum of the debit account balances and the sum of the credit account balances.

GLOSSARY OF KEY TERMS

Account A record of the additions, deductions, and balances of individual assets, liabilities, permanent stockholders' equity, dividends, revenues, and expenses (p. 107).

Accounting cycle A sequence of activities undertaken by company accountants to accumulate and report the financial information of a business (p. 100).

Accounting transaction An economic event that requires accounting recognition; an event that affects any of the elements of the accounting equation—assets, liabilities, or stockholders' equity (p. 101).

Calendar year A fiscal year that ends on December 31 (p. 101).

Chart of accounts A list of all of the general ledger account titles and their numerical code (p. 110).

Compound journal entry A journal entry containing more than one debit and one credit (p. 111).

Credit (entry) An entry on the right side (or in the credit column) of an account (p. 108).

Debit (entry) An entry on the left side (or in the debit column) of an account (p. 108).

Double-entry accounting A method of accounting that results in the recording of equal amounts of debits and credits (p. 101).

Fiscal year The annual accounting period used by a business (p. 101).

General journal An accounting record with enough flexibility so that any type of business transaction may be recorded in it; a diary of a business's accounting transactions (p. 110).

General ledger A grouping of all of a business's accounts that are used to prepare the basic financial statements (p. 112).

Journal A tabular record in which business transactions are analyzed in debit and credit terms and recorded in chronological order (p. 110).

Journal entry An entry of accounting information into a journal (p. 110).

Normal balance The side on which increases to the account are recorded. (p. 108)

Permanent account An account used to prepare the balance sheet—that is, an asset, liability, or stockholders' equity account; any balance in a permanent account at the end of an accounting period is carried forward to the following accounting period (p. 109).

Posting The transfer of information from the journal to the general ledger accounts (p. 112).

Posting references A series of abbreviations used in posting to indicate to where or from where a journal entry is posted (p. 112).

Source document Any written document or computer record evidencing an accounting transaction, such as a bank check, deposit slip, sales invoice, or cash register tape (p. 110).

T-account An abbreviated form of the formal account in the shape of a T (p. 107).

Temporary account An account used to gather information for an accounting period; revenue, expense, and dividend accounts are temporary accounts (p. 109).

Trial balance A list of the account titles in the general ledger, their respective debit or credit balances, and the totals of the debit and credit balances (p. 118).

Unearned revenue A liability representing revenues received in advance; also called *deferred revenue* (p. 104).

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 2011. 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.
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.

Required

a. Use the following accounts to create a general ledger using T-accounts.

Cash	Common Stock	Wage Expense
Accounts Receivable	Service Revenue	Advertising Expense
Equipment	Supplies Expense	Rent Expense
Accounts Payable		

Post the above accounting transactions to their general ledger T-accounts.

b. Prepare a trial balance as of October 31, 2011.

Solution

Cash				Accounts Receivable			
(1)	40,000	2,500	(2)	(6)	5,500	3,500	(7)
(7)	3,500	10,000	(3)	Bal.	2,000		
		300	(5)	Accounts Payable			
		350	(8)	(8)	350	500	(4)
		2,500	(9)			150	Bal.
Bal.	27,850			Service Revenue			
Equipment				Wage Expense			
(3)	10,000			(9)	2,500		
Common Stock				Rent Expense			
		40,000	(1)	(2)	2,500		
Supplies Expense							
(4)	500						
Advertising Expense							
(5)	300						

JUAN'S DESIGNS Unadjusted Trial Balance October 31, 2011			Debit	Credit
Cash		\$27,850		
Accounts receivable		2,000		
Equipment		10,000		
Accounts payable				\$ 150
Common stock				40,000
Service revenue				5,500
Supplies expense		500		
Wage expense		2,500		
Advertising expense		300		
Rent expense		2,500		
Totals		<u>\$45,650</u>		<u>\$45,650</u>

SELF-STUDY QUESTIONS

(Answers to Self-Study Questions are at the end of this chapter.)

- 1. Which of the following transactions does not affect the balance sheet totals? LO2
 - a. Purchased \$500 supplies on account.
 - b. Paid off a \$3,000 note payable.
 - c. Received \$4,000 cash from a bank after signing a note payable.
 - d. Ordered a new machine that will be paid for upon its delivery in two months.

- 2. Tobias Company purchased inventory on account. This transaction will affect: LO2
 - a. Only the balance sheet.
 - b. Only the income statement.
 - c. The income statement and the statement of retained earnings.
 - d. The income statement, balance sheet, and statement of retained earnings.

- L02** 3. If assets increase by \$100 and liabilities decrease by \$30, stockholders' equity must:
- Remain unchanged.
 - Increase by \$130.
 - Decrease by \$70.
 - Decrease by \$130.
- L03** 4. An account consists of how many parts?
- One.
 - Two.
 - Three.
 - It depends if it is a permanent account or a temporary account.
- L03** 5. Which of the following is true?
- The debit is on the right side of an asset account.
 - The debit is on the left side of an asset account.
 - The credit is on the left side of a liability account.
 - The debit is on the right side of an expense account.
- L03** 6. Which of the following accounts is a temporary account?
- Accounts Receivable.
 - Notes Payable.
 - Common Stock.
 - Advertising Expense.
- L03** 7. Which of the following accounts is a permanent account?
- Accounts Receivable.
 - Sales Revenue.
 - Dividends.
 - Advertising Expense.
- L04** 8. Which of the following is true?
- A debit will increase a liability account.
 - A credit will increase an asset account.
 - A credit will increase a revenue account.
 - A debit will decrease an expense account.
- L04** 9. In applying the rules of debits and credits, which of the following statements is correct?
- The word *debit* means to increase and the word *credit* means to decrease.
 - Asset, expense, and common stock accounts are debited for increases.
 - Liability, revenue, and common stock accounts are debited for increases.
 - Asset, expense, and dividends are debited for increases.
- L04** 10. Which of these accounts has a normal debit balance?
- Assets, expenses, dividends.
 - Assets, revenues, common stock.
 - Liabilities, revenues, common stock.
 - Assets, liabilities, dividends.
- L05** 11. The general ledger includes accounts for all but which of the following?
- Assets.
 - Expenses.
 - Dividends.
 - All of the above are in the general ledger.
- L06** 12. Which of the following will cause a trial balance to be out of balance:
- Mistakenly debiting an asset account instead of an expense account.
 - Posting \$123 as \$213 to both a debit and a credit account.
 - Posting the same transaction twice by mistake.
 - Posting only the debit part of a transaction.
- L05** 13. A journal entry that contains more than just two accounts is called:
- A posted journal entry.
 - An adjusting journal entry.
 - An erroneous journal entry.
 - A compound journal entry.

14. Posting refers to the process of transferring information from: **LO5**
- A journal to the general ledger accounts.
 - General ledger accounts to a journal.
 - Source documents to a journal.
 - A journal to source documents.
15. Which of the following is not one of the five steps in the accounting cycle? **LO1**
- Analyze.
 - Adjust.
 - Eliminate.
 - Report.
16. The purchase of \$500 of supplies on account will: **LO2**
- Increase both assets and stockholders' equity by \$500.
 - Increase assets and decrease liabilities by \$500.
 - Increase assets and decrease stockholders' equity by \$500.
 - Increase both assets and liabilities by \$500.

DISCUSSION QUESTIONS

- List the five major steps in the accounting cycle in their proper order.
- Define the term *fiscal year*.
- Provide three examples of source documents that underlie business transactions.
- Provide an example of a transaction that would:
 - Increase one asset account but not change the amount of total assets.
 - Decrease an asset account and a liability account.
 - Decrease an asset account and a stockholders' equity account.
 - Increase an asset account and a liability account.
- Explain the financial effect (increase, decrease, or no effect) of each of the following transactions on stockholders' equity:
 - Purchased supplies for cash.
 - Paid an account payable.
 - Paid salaries.
 - Purchased equipment for cash.
 - Invested cash in business.
 - Rendered services to customers, on account.
 - Rendered services to customers, for cash.
- The retained earnings on a balance sheet are \$80,000. Without seeing the rest of the balance sheet, can you conclude that stockholders should be able to receive a dividend in the amount of \$80,000 cash from the business? Justify your answer.
- On December 31, 2010, the Miller Company had \$700,000 in total assets and owed \$220,000 to creditors. If the corporation's common stock amounted to \$300,000, what amount of retained earnings should appear on the company's December 31, 2010, balance sheet?
- Some accounting students believe that debits are good and credits are bad. Explain why this is not an accurate way to think about debits and credits.
- What is an account?
- What information is recorded in an account?
- What does the term *debit* mean? What does the term *credit* mean?
- What type of account—asset, liability, permanent stockholders' equity, dividend, revenue, or expense—is each of the following accounts? Indicate whether a debit entry or a credit entry increases the balance of the account.

Professional Fees Earned	Common Stock
Accounts Receivable	Advertising Expense
Accounts Payable	Supplies
Cash	Dividends
- How is the normal side of an account determined?
- What is the normal balance (debit or credit) of each of the accounts in Discussion Question 12?
- Describe the nature and purpose of a general journal.
- What is the justification for the use of posting references?

17. Describe a compound journal entry.
18. What is a chart of accounts?
19. Explain the terms *general ledger* and *trial balance*. What are the primary reasons for preparing a trial balance?
20. Explain how it is possible for a trial balance to be in balance but still be in error.
21. What is a T-account and how is it used?
22. Is it possible for an accounting transaction to only affect the left side of the accounting equation and still leave the equation in balance? If so, provide an example.
23. Would a company record a transaction in its general ledger when an order is placed for the purchase of a machine that will be paid for at the time of its delivery in three months? Explain your answer.

SHORT EXERCISES

- LO4 SE3-1. Normal Balances** Indicate for each of the following accounts whether the normal balance is a debit or a credit:
- a. Accounts Receivable
 - b. Accounts Payable
 - c. Dividends
 - d. Wage Expense
 - e. Inventory
 - f. Interest Income
 - g. Retained Earnings
- LO4 SE3-2. Debit and Credit Effects** Indicate the account that will be debited for each of the following transactions:
- a. Issued common stock for cash
 - b. Borrowed money from a bank
 - c. Provided services on account
 - d. Purchased inventory on account
 - e. Collected cash from customers that owed a balance due
- LO4 SE3-3. Debit and Credit Effects** Indicate the account that will be credited for each of the following transactions:
- a. Issued common stock for cash
 - b. Borrowed money from a bank
 - c. Provided services on account
 - d. Purchased inventory on account
 - e. Collected cash from customers that owed a balance due
- LO4 SE3-4. Determine a Transaction** The Pearce Company recorded a transaction by debiting Accounts Receivable and crediting Sales Revenue. What event was being recorded?
- LO4 SE3-5. Determine the Cash Balance** The beginning-of-the-period cash balance for the Travis Company was a \$10,000 debit. Cash sales for the month were \$5,000 and sales on account were \$6,000. The company paid \$3,500 cash for current-period purchases and also paid \$2,000 cash for amounts due from last month. What is the ending debit or credit balance in the Cash account?
- LO2 SE3-6. Recording Transactions with the Accounting Equation** During the year, the Decker Company experienced the following accounting transactions:
1. Issued common stock in the amount of \$100,000
 2. Paid a \$30,000 cash dividend
 3. Borrowed \$25,000 from a bank
 4. Made a principal payment of \$2,500 on an outstanding bank loan
 5. Made an interest payment of \$1,200 on an outstanding bank loan
- Using the accounting equation, record each of the transactions in columnar format using the following template:

Assets	=	Liabilities	+	Stockholders' Equity	
Cash	=	Notes Payable	+	Common Stock	+ Retained Earnings

SE3-7. Recording Transactions with the Accounting Equation During the year, the Decker Company experienced the following accounting transactions: **LO2**

1. Purchased equipment with cash in the amount of \$100,000
2. Purchased supplies on account in the amount of \$10,000
3. Collected \$21,000 cash from customers
4. Paid a cash dividend of \$15,000

Using the accounting equation, record each of the transactions in columnar format using the following template:

Assets				=	Liabilities		+	Stockholders' Equity		
Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Accounts Payable	+	Retained Earnings

SE3-8. Posting Transactions to T-accounts Using the data from short exercise SE3-6, post your transaction analysis to the appropriate T-accounts. **LO5**

SE3-9. Posting Transactions to T-accounts Using the data from short exercise SE3-7, post your transaction analysis to the appropriate T-accounts. **LO5**

SE3-10. The following balances were taken from the general ledger of Howser Corporation as of December 31. All balances are normal. Prepare a trial balance. **LO6**

Cash	\$ 6,000	Accounts receivable	\$10,800
Accounts payable	6,000	Common stock	36,000
Equipment	30,000	Dividends	2,400
Utilities expense	2,000	Administrative expense	8,000
Sales revenue	17,200		

SE3-11. Prepare a Corrected Trial Balance The following trial balance for Magill Company has errors that cause it to be out of balance. Prepare a corrected version of the trial balance for Magill Company. **LO6**

MAGILL COMPANY		
Unadjusted Trial Balance		
December 31, 2010		
	Debit	Credit
Cash	\$ 20,000	
Inventory		\$ 85,000
Accounts receivable	30,000	
Accounts payable		12,000
Common stock		40,000
Retained earnings		58,000
Sales revenue	100,000	
Cost of goods sold	60,000	
Selling expenses	15,000	
Totals	\$225,000	\$195,000

SE3-12. The Accounting Cycle The following is the correct order of the five steps in the accounting cycle: **LO1**

- a. Analyze; adjust; record; report; close
- b. Analyze; record; adjust; report; close
- c. Analyze; record; adjust; close; report
- d. Analyze; report; adjust; record; close

SE3-13. The Account Which of the following is not part of the T-account? **LO3**

- a. Title
- b. Amount
- c. Cross-reference
- d. Analysis

EXERCISES—SET A

LO2 E3-1A. Accounting Equation

Determine the missing amount in each of the following cases:

	Assets	Liabilities	Stockholders' Equity
a.	\$200,000	\$85,000	?
b.	?	\$32,000	\$28,000
c.	\$93,000	?	\$52,000

LO2 E3-2A. Transaction Analysis

Following the example shown in (a) below, indicate the accounting effects of the listed transactions on the assets, liabilities, and stockholders' equity of Martin & Company, a corporation:

- (a) Purchased, for cash, a desktop computer for use in the office.

ANSWER: Increase assets (Office Equipment)

Decrease assets (Cash)

- (b) Rendered services and billed the client.
 (c) Paid rent for the month.
 (d) Rendered services to a client for cash.
 (e) Received amount due from a client in Transaction (b).
 (f) Purchased an office desk on account.
 (g) Paid employees' salaries for the month.
 (h) Paid for desk purchased in Transaction (f).
 (i) The company paid a dividend.

LO2 E3-3A. Analysis of Accounts

Calculate the unknown amount in each of the following five independent situations. The answer to situation (a) is given as an example.

	Account	Beginning Balance	Ending Balance	Other Information
(a)	Cash	\$ 6,100	\$ 5,250	Total cash disbursed, \$5,400.
(b)	Accounts receivable ...	8,500	9,300	Services on account, \$16,500.
(c)	Notes payable	15,000	20,000	Borrowed funds by issuing a note, \$30,000.
(d)	Accounts payable	3,280	1,720	Payments on account, \$2,900.
(e)	Common stock	32,000	46,000	Capital contribution, \$5,000.

Unknown Amounts Required	
(a)	Total cash received \$4,550
(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..... _____

LO2, LO5 E3-4A. Transaction Analysis

The accounts below are from the general ledger of The Bast Company. 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.

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">Accounts Receivable</td></tr> <tr><td style="width: 50%; text-align: center;">(a)</td><td style="width: 50%; text-align: center;">(b)</td></tr> </table>	Accounts Receivable		(a)	(b)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">Notes Payable</td></tr> <tr><td style="width: 50%; text-align: center;">(c)</td><td style="width: 50%; text-align: center;">(d)</td></tr> </table>	Notes Payable		(c)	(d)
Accounts Receivable									
(a)	(b)								
Notes Payable									
(c)	(d)								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">Office Equipment</td></tr> <tr><td style="width: 50%; text-align: center;">(e)</td><td style="width: 50%; text-align: center;">(f)</td></tr> </table>	Office Equipment		(e)	(f)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">Accounts Payable</td></tr> <tr><td style="width: 50%; text-align: center;">(g)</td><td style="width: 50%; text-align: center;">(h)</td></tr> </table>	Accounts Payable		(g)	(h)
Office Equipment									
(e)	(f)								
Accounts Payable									
(g)	(h)								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">Professional Fees Earned</td></tr> <tr><td style="width: 50%; text-align: center;">(i)</td><td style="width: 50%; text-align: center;">(j)</td></tr> </table>	Professional Fees Earned		(i)	(j)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">Dividends</td></tr> <tr><td style="width: 50%; text-align: center;">(k)</td><td style="width: 50%; text-align: center;">(l)</td></tr> </table>	Dividends		(k)	(l)
Professional Fees Earned									
(i)	(j)								
Dividends									
(k)	(l)								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">Common Stock</td></tr> <tr><td style="width: 50%; text-align: center;">(m)</td><td style="width: 50%; text-align: center;">(n)</td></tr> </table>	Common Stock		(m)	(n)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="2" style="text-align: center;">Wage Expense</td></tr> <tr><td style="width: 50%; text-align: center;">(o)</td><td style="width: 50%; text-align: center;">(p)</td></tr> </table>	Wage Expense		(o)	(p)
Common Stock									
(m)	(n)								
Wage Expense									
(o)	(p)								

E3-5A. Transaction Analysis

LO4

Match each of the following transactions of Lesch & Company 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:

	Answer
(1) Purchased supplies on account.	<u>a, d</u>
(2) Paid interest on note payable.	_____
(3) Cash dividend was paid to stockholders.	_____
(4) Returned some defective supplies and received a reduction in the amount owed.	_____
(5) Made payment to settle note payable.	_____
(6) Received an invoice for utilities used.	_____
(7) Received payment in advance from client for work to be done next month.	_____
(8) The stockholders 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 stockholders' equity | k. Debit an expense |
| f. Credit stockholders' equity | l. Credit an expense |

E3-6A. Transaction Entries

LO5

Creative Designs, a firm providing art services for advertisers, began business on June 1. The following accounts in its general ledger are needed to record the transactions for June: Cash; Accounts Receivable; Supplies; Office Equipment; Accounts Payable; Common Stock; Dividends; Service Fees Earned; Rent Expense; Utilities Expense; and Salaries Expense. Record the following transactions for June in the general journal:

- June 1 Lisa Ryan invested \$12,000 cash to begin the business; she received common stock for her investment.
- 2 Paid rent for June, \$950.
- 3 Purchased office equipment on account, \$6,400.
- 6 Purchased art materials and other supplies costing \$3,800; paid \$1,800 down with the remainder due within 30 days.
- 11 Billed clients for services, \$4,700.
- 17 Collected \$3,250 from clients on account.
- 19 Paid \$3,000 on account to office equipment company (see June 3 transaction).
- 25 Lisa Ryan received a \$2,000 dividend.
- 30 Paid utility bill for June, \$350.
- 30 Paid salaries for June, \$2,500.

E3-7A. Source Documents

LO5

For each transaction in E3-6A, indicate the related source document or documents that provide evidence supporting the transaction.

E3-8A. Nature of Accounts, Debit and Credit Rules

LO4, LO5

For each of the accounts listed below, indicate whether the account (1) is increased by a debit or a credit and (2) is a permanent account or a temporary account:

- | | |
|---------------------|---------------------|
| Accounts Payable | Common Stock |
| Advertising Expense | Dividends |
| Cash | Land |
| Equipment | Service Fees Earned |

E3-9A. Nature of Accounts, Debit and Credit Rules

LO4, LO5

In the first column, enter *permanent* or *temporary* to describe the nature of the account shown on the left. In the last three columns, enter *debit* or *credit* to describe the journal entry necessary to increase and decrease the account shown on the left, and which side of the account represents its normal balance.

	Permanent or Temporary	Increase	Decrease	Normal Balance
Asset.....	_____	_____	_____	_____
Liability.....	_____	_____	_____	_____
Common stock.....	_____	_____	_____	_____
Dividends.....	_____	_____	_____	_____
Revenue.....	_____	_____	_____	_____
Expense.....	_____	_____	_____	_____

LO4, LO5 E3-10A. Nature of Accounts, Debit and Credit Rules

For each of the accounts listed below, indicate whether the account (1) is increased by a debit or a credit and (2) is a permanent account or temporary account:

- | | |
|---------------------|-------------------|
| Accounts Receivable | Notes Payable |
| Advertising Revenue | Retained Earnings |
| Building | Supplies |
| Common Stock | Utilities Expense |

LO2, LO4 E3-11A. Transaction Analysis

Match each of the following transactions of L. Boyd & Company 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:

- | | Answer |
|---|---------------|
| (1) Stockholders contributed cash to the business. | a, f |
| (2) Purchased equipment on account. | _____ |
| (3) Received and immediately paid advertising bill. | _____ |
| (4) Purchased supplies for cash. | _____ |
| (5) Borrowed money from a bank, giving a note payable. | _____ |
| (6) Billed customers for services rendered. | _____ |
| (7) Made a partial payment on account for equipment. | _____ |
| (8) Paid employee's salary. | _____ |
| (9) Collected amounts due from customers billed in Transaction 6. | _____ |

Financial Effect of Transaction

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

LO5, LO6 E3-12A. Transaction Analysis and Trial Balance

Make T-accounts for the following accounts that appear in the general ledger of Daniel Kelly, an attorney: Cash; Accounts Receivable; Office Equipment; Legal Database Subscription; Accounts Payable; Stockholders' Equity; Dividends; Legal Fees Earned; Salaries Expense; Rent Expense; and Utilities Expense. Record the following October transactions in the T-accounts and key all entries with the number identifying the transaction. Determine the balance in each account and prepare a trial balance sheet as of October 31.

- Oct. 1 Kelly started his law practice by contributing \$19,500 cash to the business on October 1, receiving shares of common stock in the company.
- 2 Purchased office equipment on account, \$10,400.
- 3 Paid office rent for October, \$700.
- 4 Paid \$9,600 to access online legal database for two years.
- 5 Billed clients for services rendered, \$11,300.
- 6 Made \$6,000 payment on account for the equipment purchased on October 2.
- 7 Paid legal assistant's salary, \$2,800.
- 8 Collected \$9,400 from clients previously billed for services.
- 9 Received invoice for October utilities, \$180; it will be paid in November.
- 10 The company paid stockholders \$1,500 as a cash dividend.

E3-13A. Transaction Analysis and Trial Balance**LO5, LO6**

Make T-accounts for the following accounts that appear in the general ledger of Mead Pet Hospital, owned by R. Mead, a veterinarian: Cash; Accounts Receivable; Supplies; Office Equipment; Accounts Payable; Stockholders' equity; Dividends; Professional Fees Earned; Salaries Expense; and Rent Expense. Record the following December transactions in the T-accounts and key all entries with the number identifying the transaction. Finally, determine the balance in each account and prepare a trial balance as of December 31.

- Dec. 1 Mead opened a checking account on December 1 at United Bank in the name of Mead Pet Hospital and deposited \$20,000 cash. Mead received common stock for his investment.
- 2 Paid rent for December, \$1,100.
- 3 Purchased office equipment on account, \$2,900.
- 4 Purchased supplies for cash, \$1,700.
- 5 Billed clients for services rendered, \$7,300.
- 6 Paid secretary's salary, \$1,950.
- 7 Paid \$1,500 on account for the equipment purchased on December 3.
- 8 Collected \$5,800 from clients previously billed for services.
- 9 The company paid stockholders \$2,200 as a cash dividend.

E3-14A. The Account**LO3**

The following transactions occurred during December, the first month of operations for Harris Company. Create a T-account for accounts payable that includes the following five transactions.

1. Purchased \$500 of inventory on account.
2. Purchased \$300 of inventory on account.
3. Paid suppliers \$600.
4. Purchased \$400 of inventory on account.
5. Paid suppliers \$300.

EXERCISES—SET B**E3-1B. Accounting Equation****LO2**

Determine the missing amount in each of the following cases:

	Assets	Liabilities	Stockholders' Equity
a.	\$400,000	\$85,000	?
b.	?	\$54,000	\$28,000
c.	\$193,000	?	\$104,000

E3-2B. Transaction Analysis**LO2**

Following the example shown in (a) below, indicate the effects of the listed transactions on the assets, liabilities, and stockholders' equity of John Dallmus, certified public accountant, a corporation:

- (a) Purchased, for cash, a desktop computer for use in the office.
ANSWER: Increase assets (Office Equipment)
Decrease assets (Cash)
- (b) Rendered accounting services and billed client.
- (c) Paid utilities for month.
- (d) Rendered tax services to client for cash.
- (e) Received amount due from client in Transaction (b).
- (f) Purchased a copying machine on account.
- (g) Paid employees' salaries for month.
- (h) Paid for copying machine purchased in Transaction (f).
- (i) The company paid a dividend.

E3-3B. Analysis of Accounts**LO2**

Compute the unknown amount required in each of the following five independent situations. The answer to situation (a) is given as an illustration:

	Account	Beginning Balance	Ending Balance	Other Information
(a)	Cash	\$ 8,100	\$ 5,250	Total cash disbursed, \$5,400.
(b)	Accounts receivable ...	10,500	9,300	Services on account, \$16,500.
(c)	Notes payable	17,000	20,000	Borrowed funds by issuing a note, \$30,000.
(d)	Accounts payable	5,280	1,720	Payments on account, \$3,900.
(e)	Common stock	34,000	46,000	Capital contribution, \$5,000.

Unknown Amounts Required		
(a)	Total cash received	\$2,550
(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	_____

LO2, LO5 E3-4B. 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.

Accounts Receivable	Notes Payable
(a)	(c)
Office Equipment	Accounts Payable
(d)	(e)
Professional Fees Earned	Dividends
(g)	(h)
Common Stock	Wage Expense
(i)	(j)

LO4 E3-5B. 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:

	Answer
(1) Purchased supplies on account.	a, d
(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 stockholders' equity | k. Debit an expense |
| f. Credit stockholders' equity | l. Credit an expense |

E3-6B. Transaction Entries

LO5

Thoro Clean, a firm providing house-cleaning services, began business on April 1. The following accounts in its general ledger are needed to record the transactions for April: Cash; Accounts Receivable; Supplies; Prepaid Van Lease; Equipment; Notes Payable; Accounts Payable; Common Stock; Retained Earnings; Dividends; Cleaning Fees Earned; Wage Expense; Advertising Expense; and Fuel Expense. Record the following transactions for April in the general journal:

- April 1 Randy Storm invested \$9,000 cash to begin the business; he received common stock for his investment.
- 2 Paid six months' lease on a van, \$2,850.
- 3 Borrowed \$10,000 from a bank and signed a note payable agreeing to repay the \$10,000 in one year plus 10 percent interest.
- 3 Purchased \$5,500 of cleaning equipment; paid \$2,500 down with the remainder due within 30 days.
- 4 Purchased cleaning supplies for \$4,300 cash.
- 7 Paid \$350 for newspaper advertisements to run during April.
- 21 Billed customers for services, \$3,500.
- 23 Paid \$3,000 on account to cleaning equipment firm (see April 3 transaction).
- 28 Collected \$2,300 from customers on account.
- 29 Randy Storm received a \$1,000 cash dividend.
- 30 Paid wages for April, \$1,750.
- 30 Paid service station for gasoline used during April, \$95.

E3-7B. Source Documents

LO5

For each transaction in E3-6B indicate the related source document or documents that provide evidence supporting the transaction.

E3-8B. Nature of Accounts, Debit and Credit Rules

LO4, LO5

For each of the accounts listed below, indicate whether the account (1) is increased by a debit or a credit and (2) is a permanent account or a temporary account:

- | | |
|---------------------|--------------------------|
| Accounts Receivable | Common Stock |
| Supplies Expense | Dividends |
| Cash | Building |
| Equipment | Professional Fees Earned |

E3-9B. Nature of Accounts, Debit and Credit Rules

LO4, LO5

In the first column, enter *permanent* or *temporary* to describe the nature of the account shown to the left. In the last three columns, enter *debit* or *credit* to describe the journal entry necessary to increase and decrease the account shown to the left, and indicate which side of the account represents its normal balance.

	Permanent or Temporary	Increase	Decrease	Normal Balance
Asset.....	_____	_____	_____	_____
Liability.....	_____	_____	_____	_____
Common stock.....	_____	_____	_____	_____
Retained earnings....	_____	_____	_____	_____
Revenue.....	_____	_____	_____	_____
Expense.....	_____	_____	_____	_____

E3-10B. Nature of Accounts, Debit and Credit Rules

LO4, LO5

For each of the accounts listed below, indicate whether the account (1) is increased by a debit or a credit and (2) is a permanent account or a temporary account:

- | | |
|---------------------|-------------------|
| Accounts Receivable | Notes Payable |
| Sales Revenue | Retained Earnings |
| Equipment | Inventory |
| Common Stock | Rent Expense |

LO2, LO4 E3-11B. Transaction Analysis

Match each of the following transactions of R. Couche & Company, a printing company, with the appropriate letters, indicating the debits and credits to be made. The key for letters follows the list of transactions. The correct answer for Transaction (1) is given as an illustration:

	Answer
(1) Stockholders contributed cash to the business.	a, f
(2) Purchased inventory on account.	_____
(3) Received and immediately paid a utility bill.	_____
(4) Purchased supplies for cash.	_____
(5) Borrowed money from a bank, giving a note payable.	_____
(6) Billed customers for services rendered.	_____
(7) Made a partial payment on account for equipment.	_____
(8) Paid employee's salary.	_____
(9) Collected amounts due from customers billed in Transaction 6.	_____

Financial Effect of Transaction

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

LO5, LO6 E3-12B. Transaction Analysis and the Trial Balance

Make T-accounts for the following accounts that appear in the general ledger of Matthew Thomas, an attorney: Cash; Accounts Receivable; Office Equipment; Legal Database Subscription; Accounts Payable; Common Stock; Dividends; Legal Fees Earned; Salaries Expense; Rent Expense; and Utilities Expense. Record the following October transactions in the T-accounts and key all entries with the number identifying the transaction. Determine the balance in each account and prepare a trial balance as of October 31.

- Oct. 1 Thomas started his law practice by contributing \$20,000 cash to the business on October 1; he received common stock for his investment.
- 2 Purchased office equipment on account, \$12,400.
- 3 Paid office rent for October, \$700.
- 4 Paid \$11,600 to access online legal database for two years.
- 5 Billed clients for services rendered, \$11,300.
- 6 Made \$6,000 payment on account for the equipment purchased on October 2.
- 7 Paid legal assistant's salary, \$2,800.
- 8 Collected \$9,400 from clients previously billed for services.
- 9 Received invoice for October utilities, \$180; it will be paid in November.
- 10 The firm paid stockholders \$2,000 cash as a dividend.

LO5, LO6 E3-13B. Transaction Analysis and Trial Balance

Make T-accounts for the following accounts that appear in the general ledger of The Dog & Cat Hospital, owned by Kate Miller, a veterinarian: Cash; Accounts Receivable; Supplies; Office Equipment; Accounts Payable; Common Stock; Dividends; Professional Fees Earned; Salaries Expense; and Rent Expense. Record the following December transactions in the T-accounts and key all entries with the number identifying the transaction. Finally, determine the balance in each account and prepare a trial balance as of December 31.

- Dec. 1 Miller opened a checking account on December 1 at Biltmore Bank in the name of The Dog & Cat Hospital and deposited \$25,000 cash; Miller received common stock for her investment.
- 2 Paid rent for December, \$1,500.
- 3 Purchased office equipment on account, \$2,900.
- 4 Purchased supplies for cash, \$1,900.
- 5 Billed clients for services rendered, \$7,300.
- 6 Paid secretary's salary, \$1,950.
- 7 Paid \$1,500 on account for the equipment purchased on December 3.
- 8 Collected \$5,800 from clients previously billed for services.
- 9 The firm paid stockholders \$3,000 cash as a dividend.

E3-14B. The Account

LO3

The following transactions occurred during January, the first month of operations for Ruby Corporation. Create a T-account for inventory that includes the following five transactions.

1. Purchased \$1,500 of inventory on account.
2. Purchased \$1,300 of inventory on account.
3. Sold inventory with an original cost of \$1,600.
4. Purchased \$1,400 of inventory on account.
5. Sold inventory with an original cost of \$1,300.

PROBLEMS—SET A**P3-1A. Transaction Analysis**

LO2

The accounting equation of L. Chen & Company as of the beginning of the accounting period is given below, followed by seven transactions whose effects on the accounting equation are shown. Describe each transaction that occurred. Of the transactions affecting Retained Earnings, transaction (e) had no effect on net income for the period.

	Cash	+	Accounts Receivable	+	Supplies	=	Notes Payable	+	Accounts Payable	+	Common Stock	+	Retained Earnings
Balance	\$4,100	+	\$9,000	+	\$700	=	\$2,500	+	\$800	+	\$2,000	+	\$8,500
(a)	+6,500		-6,500										
(b)	-400				+400								
(c)			+7,000										+7,000
(d)	-800								-800				
(e)	-4,900												-4,900
(f)	-300				+300								
(g)	+1,200						+1,200						

P3-2A. Transaction Analysis

LO2

An analysis of the transactions of Hewitt Detective Agency for the month of May appears below. Line 1 summarizes the company's accounting equation data as of May 1; lines 2–10 represent the transactions for May:

	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Notes Payable	+	Accounts Payable	+	Common Stock	+	Retained Earnings
(1)	\$2,400	+	\$7,600	+	\$500	+	\$8,000	=	\$5,000	+	\$300	+	\$10,000	+	\$3,200
(2)	+2,000								+2,000						
(3)	+6,100		-6,100												
(4)					+980						+980				
(5)			+6,800												+6,800
(6)	-300										-300				
(7)	+1,500														+1,500
(8)	-800														-800
(9)	-750						+750								
(10)	-2,500								-2,500						

Required

- Show that assets equal liabilities plus stockholders' equity as of May 1.
- Describe the apparent transaction indicated by each line. (For example, line 2: Borrowed \$2,000, giving a note payable.) If any line could reasonably represent more than one type of transaction, describe each type.
- Show that assets equal liabilities plus stockholders' equity as of May 31.

P3-3A. Transaction Analysis

LO2

Grant Appraisal Service provides commercial and industrial appraisals and feasibility studies. On January 1, the assets and liabilities of the business were the following: Cash, \$6,700; Ac-



counts Receivable, \$14,800; Notes Payable, \$2,500; and Accounts Payable, \$600. Common Stock had a balance of \$18,400. Assume that Retained Earnings as of January 1, 2010, were zero. The following transactions occurred during the month of January:

- Jan. 1 Paid rent for January, \$950.
 2 Received \$8,800 payment on customers' accounts.
 3 Paid \$500 on accounts payable.
 4 Received \$1,600 for services performed for cash customers.
 5 Borrowed \$5,000 from a bank and signed a note payable for that amount.
 6 Billed the city \$6,200 for a feasibility study performed; billed various other credit customers, \$1,900.
 7 Paid the salary of an assistant, \$4,000.
 8 Received invoice for January utilities, \$410.
 9 Paid \$6,000 cash for employee salaries.
 10 Purchased a van (on January 31) for business use, \$9,800.
 11 Paid \$50 to bank as January interest on the outstanding notes payable.

Required

- Set up an accounting equation in columnar form with the following individual assets, liabilities, and stockholders' equity accounts: Cash, Accounts Receivable, Van, Notes Payable, Accounts Payable, Common Stock, and Retained Earnings. Enter the January 1 balances below each item. (*Note:* The beginning Van account balance is \$0.)
- Show the impact (increase or decrease) of transactions 1–11 on the beginning balances, and total the columns to show that assets equal liabilities plus stockholders' equity as of January 31.

LO2 P3-4A. Transaction Analysis

On June 1, 2010, a group of bush pilots in Thunder Bay, Ontario, Canada, formed the Outpost Fly-In Service, Inc., by selling \$50,000 of common stock for cash. The group then leased several amphibious aircraft and docking facilities, equipping them to transport campers and hunters to outpost camps owned by various resorts. The following transactions occurred during June 2010:

- June 1 Sold common stock for cash, \$50,000.
 2 Paid June rent for aircraft, dockage, and dockside office, \$4,800.
 3 Received invoice for the cost of a reception the firm gave to entertain resort owners, \$1,600.
 4 Paid for June advertising in various sports magazines, \$900.
 5 Paid insurance premium for June, \$1,800.
 6 Rendered fly-in services for various groups for cash, \$22,700.
 7 Billed the Canadian Ministry of Natural Resources for transporting mapping personnel, \$2,900, and billed various firms for fly-in services, \$13,000.
 8 Paid \$1,500 on accounts payable.
 9 Received \$13,200 on account from clients.
 10 Paid June wages, \$16,000.
 11 Received invoice for the cost of fuel used during June, \$3,500.
 12 Paid a cash dividend, \$3,000.

Required

- Set up an accounting equation in columnar form with the following column headings: Cash, Accounts Receivable, Accounts Payable, Common Stock, and Retained Earnings.
- Show how the June transactions affect the items in the accounting equation, and total all columns to show that assets equal liabilities plus stockholders' equity as of June 30. (*Note:* Revenues, expenses, and dividends affect Retained Earnings.)

LO2 P3-5A. Accounting Equation

Determine the following:

- The stockholders' equity of a company that has assets of \$450,000 and liabilities of \$326,000.

- b. The retained earnings of a company that has assets of \$618,000, liabilities of \$225,000, and common stock of \$165,000.
- c. The assets of a corporation that has liabilities of \$400,000, common stock of \$200,000, and retained earnings of \$185,000.

P3-6A. Transaction Analysis

LO2

Following the example shown in (a) below, indicate the effects of the listed transactions on the assets, liabilities, and stockholders' equity of Martin Andrews & Company.

- (a) Rendered legal services to clients for cash.

ANSWER: Increase assets (Cash)

Increase stockholders' equity (Retained Earnings)

- (b) Purchased office supplies on account.
- (c) Andrews invested cash into the firm and received stock for his investment.
- (d) Paid amount due on account for office supplies purchased in (b).
- (e) Borrowed cash from a bank and signed a six-month note payable.
- (f) Rendered services and billed clients.
- (g) Purchased, for cash, a desk lamp for the office.
- (h) Paid interest on a note payable to the bank.
- (i) Received invoice for the current month's utilities.

P3-7A. Transaction Analysis

LO2

On October 1, Alice Bloom started a consulting firm. The asset, liability, and stockholders' equity account balances after each of her first six transactions are shown below. Describe each of these six transactions:

Amounts after Transaction													
	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Notes Payable	+	Common Stock	+	Retained Earnings
(a)	\$6,000	+	\$ 0	+	\$ 0	+	\$ 0	=	\$ 0	+	\$6,000	+	\$ 0
(b)	4,000	+	0	+	2,000	+	0	=	0	+	6,000	+	0
(c)	7,500	+	0	+	2,000	+	0	=	3,500	+	6,000	+	0
(d)	2,500	+	0	+	2,000	+	5,000	=	3,500	+	6,000	+	0
(e)	2,500	+	1,000	+	2,000	+	5,000	=	3,500	+	6,000	+	1,000
(f)	3,000	+	500	+	2,000	+	5,000	=	3,500	+	6,000	+	1,000

P3-8A. Determination of Omitted Financial Statement Data

LO2

For the four unrelated situations, A-D, calculate the unknown amounts indicated by the letters appearing in each column:

	A	B	C	D
Beginning				
Assets.....	\$28,000	\$12,000	\$28,000	\$ (d)
Liabilities.....	18,600	5,000	19,000	9,000
Ending				
Assets.....	30,000	26,000	34,000	40,000
Liabilities.....	17,300	(b)	15,000	19,000
During the Year				
Common stock.....	2,000	4,500	(c)	3,500
Sales revenues.....	(a)	28,000	18,000	24,000
Dividends.....	5,000	1,500	1,000	6,500
Expenses.....	8,500	21,000	11,000	17,000

P3-9A. Transaction Analysis

LO2

Appearing below is an analysis of the June transactions for Rhode Consulting Services. Line 1 summarizes Rhode's accounting equation data as of June 1; lines 2-10 are the transactions for the month of June:

	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Notes Payable	+	Accounts Payable	+	Common Stock	+	Retained Earnings
(1)	\$3,500	+	\$5,200	+	\$820	+	\$9,000	=	\$3,000	+	\$600	+	\$10,920	+	\$4,000
(2)					+670						+670				
(3)							+5,000		+5,000						
(4)	+4,200		-4,200												
(5)			+7,800												+7,800
(6)	-600										-600				
(7)	-200				+200										
(8)	-4,600														-4,600
(9)	+2,000								+2,000						
(10)							+750						+750		

Required

- Show that assets equal liabilities plus stockholders' equity as of June 1.
- Describe the transaction indicated by each line. For example, line 2: Purchased supplies on account, \$670. If any line could reasonably represent more than one type of transaction, describe each type.
- Show that assets equal liabilities plus stockholders' equity as of June 30.

LO2 P3-10A. Transaction Analysis

Grace Main began the Main Answering Service in December 2010. The firm provides services for professional people and is currently operating with leased equipment. On January 1, 2011, the assets and liabilities of the business were: Cash, \$4,400; Accounts Receivable, \$6,900; Notes Payable, \$1,500; and Accounts Payable, \$600. Assume that Retained Earnings as of January 1, 2011, were zero. The balance of Common Stock was \$9,200. The following transactions occurred during the month of January:

- Jan. 1 Paid rent on office and equipment for January, \$800.
- 2 Collected \$4,500 on account from clients.
- 3 Borrowed \$2,000 from a bank and signed a note payable for that amount.
- 4 Billed clients for work performed on account, \$9,500.
- 5 Paid \$400 on accounts payable.
- 6 Received invoice for January advertising, \$550.
- 7 Paid January salaries, \$3,800.
- 8 Paid January utilities, \$430.
- 9 Paid stockholders a dividend of \$2,600 cash.
- 10 Purchased fax machine (on January 31) for business use, \$1,400.
- 11 Paid \$30 to the bank as January interest on the outstanding notes payable.

Required

- Set up an accounting equation in columnar form with the following individual assets, liabilities, and stockholders' equity accounts: Cash, Accounts Receivable, Equipment, Notes Payable, Accounts Payable, Common Stock, and Retained Earnings. Enter the January 1 balances below each item. (*Note:* The beginning Equipment account balance is \$0.)
- Show the impact (increase or decrease) of the January transactions on the beginning balances, and total all columns to show that assets equal liabilities plus stockholders' equity as of January 31.

LO2 P3-11A. Transaction Analysis

On December 1, Peter Allen started Career Services Inc., providing career and vocational counseling services. The following transactions took place during the month of December:

- Dec. 1 Allen invested \$7,000 in the business, receiving common shares.
- 2 Paid rent for December on furnished office space, \$750.
- 3 Received invoice for December advertising, \$500.
- 4 Borrowed \$15,000 from a bank and signed a note payable for that amount.
- 5 Received \$1,200 for counseling services rendered for cash.

- 6 Billed certain governmental agencies and other clients for counseling services, \$6,800.
- 7 Paid secretary’s salary, \$2,200.
- 8 Paid December utilities, \$370.
- 9 Paid stockholders a dividend of \$900 cash.
- 10 Purchased land for cash to use as a site for a new facility, \$13,000.
- 11 Paid \$100 to the bank as December interest on a note payable.

Required

- a. Set up an accounting equation in columnar form with the following column headings: Cash, Accounts Receivable, Land, Notes Payable, Accounts Payable, Common Stock, and Retained Earnings.
- b. Show how the December transactions affect the items in the accounting equation, and total all columns to show that assets equal liabilities plus stockholders’ equity as of December 31.

P3-12A. Transaction Analysis and the Effect of Errors on the Trial Balance

LO4, LO5, LO6

The following T-accounts contain numbered entries for the May transactions of Carol Marsh, a market analyst, who opened her business on May 1, 2010:

Cash				Common Stock			
(1)	13,000	4,800	(2)		13,000	(1)	
(9)	3,700	810	(4)				
		1,950	(6)				
		600	(8)				
Accounts Receivable				Dividends			
(5)	6,400	3,700	(9)	(8)	600		
Office Supplies				Professional Fees Earned			
(3)	2,800				6,400	(5)	
Office Equipment				Rent Expense			
(2)	4,800			(4)	810		
Accounts Payable				Utilities Expense			
(6)	1,950	2,800	(3)	(7)	270		
		270	(7)				

Required

- a. Give a description of each of the nine numbered transactions entered in the above T-accounts. Example: (1) Carol Marsh invested \$13,000 of her personal funds in her business.
- b. The following trial balance, prepared from Marsh’s data as of May 31, contains several errors. Itemize the errors and indicate the correct totals for the trial balance.

CAROL MARSH & COMPANY		
Unadjusted Trial Balance		
May 31, 2010		
	Debit	Credit
Cash	\$ 8,450	
Accounts receivable	3,700	
Office supplies	2,800	
Office equipment	4,800	
Accounts payable		\$ 1,120
Common stock		13,000
Dividends		600
Professional fees earned		6,400
Rent expense	810	
Totals	<u>\$20,560</u>	<u>\$21,120</u>

P3-13A. Transaction Analysis and Trial Balance

LO4, LO5, LO6

Pam Brown owns Art Graphics, a firm providing designs for advertisers and market analysts. On July 1, the business’s general ledger showed the following normal account balances:



Cash	\$ 8,500	Notes payable.....	\$ 5,000
Accounts receivable	9,800	Accounts payable	2,100
		Common stock	2,000
		Retained earnings	<u>9,200</u>
Total Assets	<u>\$18,300</u>	Total Liabilities and Stockholders' Equity	<u>\$18,300</u>

The following transactions occurred during the month of July:

- July 1 Paid July rent, \$670.
- 2 Collected \$7,100 on account from customers.
- 3 Paid \$2,500 installment due on the \$5,000 noninterest-bearing note payable.
- 4 Billed customers for design services rendered on account, \$16,550.
- 5 Rendered design services and collected from cash customers, \$1,200.
- 6 Paid \$1,400 to creditors on account.
- 7 Collected \$12,750 on account from customers.
- 8 Paid a delivery service for delivery of graphics to commercial firms, \$400.
- 9 Paid July salaries, \$4,600.
- 10 Received invoice for July advertising expense, to be paid in August, \$600.
- 11 Paid utilities for July, \$350.
- 12 Paid stockholders a dividend of \$2,000 cash.
- 13 Received invoice for supplies used in July, to be paid in August, \$2,260.
- 14 Purchased computer for \$4,300 cash to be used in the business starting next month.

Required

- a. Set up accounts for the general ledger accounts with July 1 balances and enter the beginning balances. Also provide the following accounts: Equipment; Service Fees Earned; Rent Expense; Salaries Expense; Delivery Expense; Advertising Expense; Utilities Expense; Supplies Expense; and Dividends. Record the listed transactions in the accounts.
- b. Prepare a trial balance as of July 31.

L04, L05, L06 P3-14A. Transaction Analysis and Trial Balance

Outpost Fly-In Service, Inc., operates leased amphibious aircraft and docking facilities, equipping the firm to transport campers and hunters from Vancouver, Canada, to outpost camps owned by various resorts. On August 1, 2010, the firm's trial balance was as follows:

OUTPOST FLY-IN SERVICE, INC.		
Unadjusted Trial Balance		
August 1, 2010		
	Debit	Credit
Cash	\$52,600	
Accounts receivable	23,200	
Notes payable.....		\$ 3,000
Accounts payable		1,700
Common stock		50,000
Retained earnings		<u>21,100</u>
Totals	<u>\$75,800</u>	<u>\$75,800</u>

During the month of August, the following transactions occurred:

- Aug. 1 Paid August rental cost for aircraft, dockage, and dockside office, \$5,000.
- 2 Paid insurance premium for August, \$1,800.
- 3 Paid for August advertising in various sports magazines, \$1,000.
- 4 Rendered fly-in services for various groups for cash, \$13,750.
- 5 Billed the Canadian Ministry of Natural Resources for services in transporting mapping personnel, \$3,200.
- 6 Received \$17,400 on account from clients.
- 7 Paid \$1,500 on accounts payable.
- 8 Billed various clients for services, \$16,400.
- 9 Paid interest on a note payable for August, \$25.
- 10 Paid August wages, \$12,800.

- 11 Received invoice for the cost of fuel used during August, \$3,200.
- 12 Paid a cash dividend, \$4,500 (debit Retained Earnings).

Required

- a. Set up accounts for each item in the August 1 trial balance and enter the beginning balances. Also provide accounts for the following items: Service Fees Earned, Wage Expense, Advertising Expense, Rent Expense, Fuel Expense, Insurance Expense, and Interest Expense. Record the transactions for August in the accounts, using the dates given.
- b. Prepare a trial balance as of August 31.

P3-15A. Transaction Analysis and Trial Balance

Mary Aker opened a tax practice on June 1. The following accounts will be needed to record her transactions for June: Cash; Accounts Receivable; Office Supplies; Tax Library; Office Furniture and Fixtures; Notes Payable; Accounts Payable; Common Stock; Dividends; Professional Fees Earned; Rent Expense; Salaries Expense; Advertising Expense; Utilities Expense; and Interest Expense. The following transactions occurred during the month of June:

LO4, LO5, LO6



- June 1 Aker opened a business checking account at a local bank, investing \$16,000 in her practice in exchange for common stock.
- 2 Purchased office furniture and fixtures for \$9,800, paid \$2,800 cash, and gave a note payable for the balance.
- 3 Purchased books and software for a tax library on account, \$3,700.
- 4 Purchased office supplies for cash, \$560.
- 5 Paid rent for June, \$750.
- 6 Returned \$300 of books with defective bindings. The return reduced the amount owed to the supplier.
- 7 Billed clients for professional services rendered, \$7,600.
- 8 Paid \$1,700 on account for the library items purchased on June 3.
- 9 Collected \$5,900 on account from clients billed on June 7.
- 10 Paid June salaries, \$2,900.
- 11 Received invoice for June advertising, to be paid in July, \$300.
- 12 Paid stockholders \$800 cash as a dividend.
- 13 Paid utilities for June, \$160.
- 14 Paid interest for June on note payable, \$60.

Required

- a. Record the above transactions in T-accounts, and key entries with the number of the transactions.
- b. Prepare a trial balance as of June 30.

P3-16A. Transaction Analysis and the Effect of Errors on the Trial Balance

The following T-accounts contain numbered entries for the May transactions of Flores Corporation, an architectural firm, which opened its offices on May 1:

LO4, LO5, LO6

Cash				Accounts Payable			
(1)	20,000	1,400	(4)	(5)	310	1,530	(3)
(10)	5,200	5,950	(7)	(8)	1,000	290	(9)
		1,000	(8)				
Accounts Receivable				Common Stock			
(6)	8,750	5,200	(10)			20,000	(1)
Supplies				Professional Fees Earned			
(3)	1,530	310	(5)			8,750	(6)
Office Equipment				Rent Expense			
(2)	5,000			(4)	1,400		
Notes Payable				Utilities Expense			
		5,000	(2)	(9)	290		
Salaries Expense							
(7)	5,950						

Required

- Give a description of each of the 10 numbered transactions entered in the above accounts. Example: (1) Flores Corporation issued common stock for cash, \$20,000.
- The following trial balance, prepared for Flores Corporation as of May 31, contains several errors. Itemize the errors, and indicate the correct totals for the trial balance.

FLORES CORPORATION Unadjusted Trial Balance May 31, 2010		
	Debit	Credit
Cash	\$61,850	
Accounts receivable	3,550	
Supplies	1,220	
Office equipment		\$ 5,000
Notes payable		50,000
Accounts payable		510
Common stock		2,000
Professional fees earned		8,570
Rent expense	1,400	
Utilities expense	290	
Salaries expense	5,950	
Totals	<u>\$74,260</u>	<u>\$66,080</u>

LO5, LO6 P3-17A. Transaction Analysis and Trial Balance

James Behm, electrical contractor, began business on May 1. The following transactions occurred during the month of May:

- May 1 Behm invested \$18,000 of his personal funds in the business in exchange for common stock.
- 2 Purchased equipment on account, \$4,200.
- 3 Returned \$200 of equipment that was not satisfactory. The return reduced the amount owed to the supplier.
- 4 Purchased supplies on account, \$860.
- 5 Purchased a truck for \$10,500. Behm paid \$5,500 cash and gave a note payable for the balance.
- 6 Paid rent for May, \$875.
- 7 Paid fuel cost for truck, \$60.
- 8 Billed customers for services rendered, \$13,700.
- 9 Paid \$3,000 on account for equipment purchased on May 2.
- 10 Paid utilities for May, \$210.
- 11 Received invoice for May advertising, to be paid in June, \$280.
- 12 Paid employees' wages, \$3,350.
- 13 Collected \$8,600 on accounts receivable.
- 14 Paid stockholders \$1,500 cash as a dividend.
- 15 Paid interest for May on an outstanding note payable, \$40.

Required

- Record the above transactions in T-accounts, and key entries with the numbers of the transactions. The following accounts will be needed to record the transactions for May: Cash; Accounts Receivable; Supplies; Equipment; Truck; Notes Payable; Accounts Payable; Common Stock; Dividends; Service Revenue; Rent Expense; Wages Expense; Utilities Expense; Truck Expense; Advertising Expense; and Interest Expense.
- Prepare a trial balance as of May 31.

PROBLEMS—SET B**LO2 P3-1B. Transaction Analysis**

The accounting equation of Matthew Thomas, attorney, at the beginning of an accounting period is given below, followed by seven transactions whose effects on the accounting equation are

shown. Describe each transaction that occurred. Of the transactions affecting retained earnings, transaction (e) had no effect on net income for the period.

	Cash	+	Accounts Receivable	+	Supplies	=	Notes Payable	+	Accounts Payable	+	Common Stock	+	Retained Earnings
Balance	\$4,100	+	\$9,000	+	\$900	=	\$2,500	+	\$1,000	+	\$7,500	+	\$3,000
(a)	+7,500		-7,500										
(b)					+400				+400				
(c)			+8,000										+8,000
(d)	-800								-800				
(e)	-4,900												-4,900
(f)	-300				+300								
(g)	+3,200						+3,200						

P3-2B. Transaction Analysis

LO2

An analysis of the transactions of Likert Shipping Services for the month of May appears below. Line 1 summarizes Likert's accounting equation data as of May 1; lines 2–10 represent the transactions for the month of May:

	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Notes Payable	+	Accounts Payable	+	Common Stock	+	Retained Earnings
(1)	\$2,400	+	\$7,600	+	\$900	+	\$9,000	=	\$6,000	+	\$700	+	\$3,200	+	\$10,000
(2)	+2,000								+2,000						
(3)	+6,100		-6,100												
(4)					+980						+980				
(5)			+6,800												+6,800
(6)	-300										-300				
(7)	+1,500														+1,500
(8)	-800														-800
(9)	-750						+750								
(10)	-2,500								-2,500						

Required

- Show that assets equal liabilities plus stockholders' equity as of May 1.
- Describe the apparent transaction indicated by each line. (For example, line 2: Borrowed \$2,000, giving a note payable.) If any line could reasonably represent more than one type of transaction, describe each type.
- Show that assets equal liabilities plus stockholders' equity as of May 31.

P3-3B. Transaction Analysis

LO2

Smith Appraisal Service provides commercial and industrial appraisals and feasibility studies. On January 1, the assets and liabilities of the business were the following: Cash, \$8,700; Accounts Receivable, \$16,800; Notes Payable, \$6,500; and Accounts Payable, \$3,600. Assume that Retained Earnings as of January 1, were zero. The balance of Common Stock was \$15,400. The following transactions occurred during the month of January:



- Jan. 1 Paid rent for January, \$1,000.
- 2 Received \$9,800 on customers' accounts.
- 3 Paid \$900 on accounts payable.
- 4 Received \$1,600 for services performed for cash customers.
- 5 Borrowed \$8,000 from a bank and signed a note payable for that amount.
- 6 Billed the city \$8,200 for a feasibility study performed; billed various other credit customers, \$2,900.
- 7 Paid salary of assistant, \$4,500.
- 8 Received invoice for January utilities, \$410.
- 9 Paid \$6,000 cash dividends.
- 10 Purchased an automobile (on January 31) for business use, \$9,800 cash.
- 11 Paid \$150 to the bank as January interest on an outstanding note payable.

Required

- Set up an accounting equation in columnar form with the following individual assets, liabilities, and stockholders' equity accounts: Cash, Accounts Receivable, Automobile, Notes Payable, Accounts Payable, Common Stock, and Retained Earnings. Enter January 1 balances below each item. (*Note:* The beginning Automobile amount is \$0.)
- Show the impact (increase or decrease) of transactions 1–11 on the beginning balances, and total the columns to show that assets equal liabilities plus stockholders' equity as of January 31.

LO2 P3-4B. Transaction Analysis

On June 1, a group of bush pilots in British Columbia, Canada, formed the BC Back-Country Airlines, Inc., by selling \$80,000 of common stock for cash. The group then leased several aircraft and docking facilities, equipping them to transport campers and hunters to outpost camps owned by various resorts. The following transactions occurred during June:

- June
- Sold common stock for cash, \$80,000.
 - Paid June rent for aircraft, dockage, and dockside office, \$5,500.
 - Received invoice for the cost of a reception the firm gave to entertain resort owners, \$2,600.
 - Paid for June advertising in various sports magazines, \$1,900.
 - Paid insurance premium for January, \$2,800.
 - Rendered services for various groups for cash, \$25,000.
 - Billed the Canadian Ministry of Natural Resources for transporting mapping personnel, \$3,900, and billed various firms for services, \$15,000.
 - Paid \$1,500 on accounts payable.
 - Received \$13,200 on account from clients.
 - Paid June wages, \$16,000.
 - Received an invoice for the cost of fuel used during June, \$3,500.
 - Paid a cash dividend, \$5,000.

Required

- Set up an accounting equation in columnar form with the following column headings: Cash, Accounts Receivable, Accounts Payable, Common Stock, and Retained Earnings.
- Show how the June transactions affect the items in the accounting equation, and total all columns to show that assets equal liabilities plus stockholders' equity as of June 30.

LO2 P3-5B. Accounting Equation

Determine the following:

- The stockholders' equity of a company that has assets of \$480,000 and liabilities of \$330,000.
- The retained earnings of a company that has assets of \$675,000, liabilities of \$225,000, and common stock of \$165,000.
- The assets of a corporation that has liabilities of \$500,000, common stock of \$300,000, and retained earnings of \$255,000.

LO2 P3-6B. Transaction Analysis

Following the example shown in (a) below, indicate the effects of the listed transactions on the assets, liabilities, and stockholders' equity of McKay & Company:

- Rendered services to clients for cash.
ANSWER: Increase assets (Cash)
Increase stockholders' equity (Retained Earnings)
- Purchased office supplies on account.
- Invested cash in the firm in exchange for common stock.
- Paid amount due on account for supplies purchased in (b).
- Borrowed cash from a bank and signed a six-month note.
- Rendered services and billed clients.
- Purchased, for cash, a desk lamp for the office.
- Paid interest on note payable to bank.
- Received an invoice for the current month's utilities.

P3-7B. Transaction Analysis

LO2

On October 1, Deloitte & Coopers started a consulting firm. The asset, liability, and stockholders' equity account balances after each of the firm's first six transactions are shown below. Describe each of these six transactions.

	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Notes Payable	+	Common Stock	+	Retained Earnings
(a)	\$6,000	+	\$ 0	+	\$ 0	+	\$ 0	=	\$ 0	+	\$6,000	+	\$ 0
(b)	4,000	+	0	+	2,000	+	0	=	0	+	6,000	+	0
(c)	7,500	+	0	+	2,000	+	0	=	3,500	+	6,000	+	0
(d)	2,500	+	0	+	2,000	+	5,000	=	3,500	+	6,000	+	0
(e)	2,500	+	2,000	+	2,000	+	5,000	=	3,500	+	6,000	+	2,000
(f)	3,000	+	1,500	+	2,000	+	5,000	=	3,500	+	6,000	+	2,000

P3-8B. Determination of Omitted Financial Statement Data

LO2

For the four unrelated situations, A-D, below, calculate the unknown amounts indicated by the letters appearing in each column:

	A	B	C	D
Beginning				
Assets.....	\$38,000	\$12,000	\$28,000	\$ (d)
Liabilities.....	18,600	5,000	10,000	9,000
Ending				
Assets.....	30,000	36,000	34,000	40,000
Liabilities.....	17,300	(b)	15,000	15,000
During the Year				
Common stock.....	2,000	4,500	(c)	3,500
Revenues.....	(a)	28,000	18,000	24,000
Dividends.....	5,000	1,500	1,000	6,500
Expenses.....	8,500	21,000	11,000	17,000

P3-9B. Transaction Analysis

LO2

Appearing below is an analysis of the June transactions for Carlton Communications Company. Line 1 summarizes Carlton's accounting equation data as of June 1; lines 2-10 are the transactions for June:

	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Notes Payable	+	Accounts Payable	+	Common Stock	+	Retained Earnings
(1)	\$3,500	+	\$5,200	+	\$820	+	\$12,000	=	\$3,000	+	\$600	+	\$10,920	+	\$7,000
(2)					+670						+670				
(3)							+6,000		+6,000						
(4)	+4,200		-4,200												
(5)			+7,800												+7,800
(6)	-600										-600				
(7)	-200				+200										
(8)	-4,600														-4,600
(9)	+3,000								+3,000						
(10)	-750						+750								

Required

- Show that assets equal liabilities plus stockholders' equity as of June 1.
- Describe the apparent transaction indicated by each line. For example, line 2: Purchased supplies on account, \$670. If any line could reasonably represent more than one type of transaction, describe each type.
- Show that assets equal liabilities plus stockholders' equity as of June 30.

P3-10B. Transaction Analysis

LO2

Torrey Mann began the Mann Word Processing Service in December 2009. The firm provides word-processing services for businesses and is currently operating with leased equipment. On January 1, 2010, the assets and liabilities of the business were: Cash, \$6,400; Accounts Receivable, \$8,900; Notes Payable, \$3,500; and Accounts Payable, \$900. Assume that Retained Earnings as of January 1, 2010, were zero. Common Stock balance was \$10,900. The following transactions occurred during the month of January:

- Jan. 1 Paid rent on office and equipment for January, \$900.
- 3 Collected \$6,500 on account from clients.
- 3 Borrowed \$5,000 from a bank and signed a note payable for that amount.
- 4 Billed clients for work performed on account, \$8,500.
- 5 Paid \$400 on accounts payable.
- 6 Received invoice for January advertising, \$750.
- 7 Paid January salaries, \$4,800.
- 8 Paid January utilities, \$230.
- 9 Paid stockholders a dividend in the amount of \$2,600.
- 10 Purchased fax machine (on January 31) for business use, \$1,400.
- 11 Paid \$130 to bank as January interest on the outstanding notes payable.

Required

- a. Set up an accounting equation in columnar form with the following individual assets, liabilities, and stockholders' equity accounts: Cash, Accounts Receivable, Equipment, Notes Payable, Accounts Payable, Common Stock, Retained earnings. Enter the January 1 balances below each item. (*Note:* The beginning Equipment amount is \$0.)
- b. Show the impact (increase or decrease) of the January transactions on the beginning balances, and total all columns to show that assets equal liabilities plus stockholders' equity as of January 31.



LO2 P3-11B. Transaction Analysis

On December 1, Judy Johnson started Adult Career Services, which provided career and vocational counseling services to individuals. The following transactions took place during the month of December:

- Dec. 1 Johnson invested \$9,000 in the business in exchange for common stock.
- 2 Paid rent for December on furnished office space, \$950.
- 3 Received invoice for December advertising, \$800.
- 4 Borrowed \$25,000 from a bank and signed a note payable for that amount.
- 5 Received \$4,200 for counseling services rendered for cash.
- 6 Billed certain governmental agencies and other clients for counseling services, \$9,800.
- 7 Paid secretary's salary, \$3,200.
- 8 Paid December utilities, \$370.
- 9 Paid stockholders a dividend in the amount of \$900.
- 10 Purchased land for cash to use as a site for the company's future offices, \$23,000.
- 11 Paid \$100 to the bank as December interest on the outstanding note payable.

Required

- a. Set up an accounting equation in columnar form with the following column headings: Cash, Accounts Receivable, Land, Notes Payable, Accounts Payable, Common stock, and Retained Earnings.
- b. Show how the December transactions affect the items in the accounting equation, and total all columns to show that assets equal liabilities plus stockholders' equity as of December 31.

LO4, LO5, LO6 P3-12B. Transaction Analysis and the Effect of Errors on Trial Balance

The following T-accounts contain numbered entries for the May transactions of Valerie Rankine who opened a consulting services business on May 1:

Cash				Common Stock			
(1)	20,000	4,800	(2)		20,000	(1)	
(9)	3,700	810	(4)				
		1,950	(6)				
		600	(8)				
Accounts Receivable				Dividends			
(5)	6,400	3,700	(9)	(8)	600		
Office Supplies				Professional Fees Earned			
(3)	2,800				6,400	(5)	

Office Equipment				Rent Expense	
(2)	4,800			(4)	810
Accounts Payable				Utilities Expense	
(6)	1,950	2,800	(3)	(7)	270
		270	(7)		

Required

- Give a description of each of the nine numbered transactions entered in the above accounts. Example: (1) Valerie Rankine invested \$20,000 of her personal funds in the business in exchange for common stock.
- The following trial balance, prepared for Rankine’s firm as of May 31, contains several errors. Itemize the errors and indicate the correct totals for the trial balance.

RANKINE CONSULTING SERVICES		
Unadjusted Trial Balance		
May 31, 2010		
	Debit	Credit
Cash	\$15,450	
Accounts receivable	3,700	
Office supplies	2,800	
Office equipment	4,800	
Accounts payable		\$ 1,120
Common stock		20,000
Dividends		600
Professional fees earned		6,400
Rent expense	810	
Totals	<u>\$27,560</u>	<u>\$28,120</u>

P3-13B. Transaction Analysis and Trial Balance

Ashley Somers owns San Diego Art Company, a firm providing designs for advertisers, market analysts, and others. On July 1, the business’s general ledger showed the following normal account balances:

LO4, LO5, LO6



Cash	\$10,500	Notes payable	\$ 5,000
Accounts receivable	9,800	Accounts payable	2,100
		Common stock	11,200
		Retained earnings	2,000
Total assets	<u>\$20,300</u>	Total Liabilities and Stockholders’ Equity	<u>\$20,300</u>

The following transactions occurred during the month of July:

- July 1 Paid July rent, \$670.
- 2 Collected \$8,100 on account from customers.
- 3 Paid \$2,500 installment due on the \$5,000 noninterest-bearing note payable to a relative.
- 4 Billed customers for design services rendered on account, \$19,550.
- 5 Rendered design services and collected from cash customers, \$1,200.
- 6 Paid \$1,700 to creditors on account.
- 7 Collected \$14,750 on account from customers.
- 8 Paid a delivery service for delivery of graphics to commercial firms, \$400.
- 9 Paid July salaries, \$4,600.
- 10 Received invoice for July advertising expense, to be paid in August, \$600.
- 11 Paid utilities for July, \$350.
- 12 The business paid a \$2,000 cash dividend.
- 13 Received invoice for supplies used in July, to be paid in August, \$2,260.
- 14 Purchased a computer for \$4,300 cash to be used in the business starting next month.

Required

- Set up accounts for the general ledger accounts with July 1 balances and enter the beginning balances. Also provide the following accounts: Equipment; Dividends; Service Fees

- Earned; Rent Expense; Salaries Expense; Delivery Expense; Advertising Expense; Utilities Expense; and Supplies Expense. Record the listed transactions in the accounts.
- b. Prepare a trial balance as of July 31.

LO4, LO5, LO6 P3-14B. Transaction Analysis and Trial Balance

BC Back-Country Airlines, Inc., operates leased amphibious aircraft and docking facilities, equipping the firm to transport campers and hunters from British Columbia, Canada, to outpost camps owned by various resorts. On August 1, the firm’s trial balance was as follows:

BC BACK-COUNTRY AIRLINES, INC.		
Unadjusted Trial Balance		
August 1, 2010		
	Debit	Credit
Cash	\$ 82,600	
Accounts receivable	23,200	
Notes payable		\$ 3,000
Accounts payable		1,700
Common stock		80,000
Retained earnings		21,100
Totals	<u>\$105,800</u>	<u>\$105,800</u>

During August the following transactions occurred:

- Aug. 1 Paid August rental cost for aircraft, dockage, and dockside office, \$6,000.
- 2 Paid the insurance premium for August, \$2,800.
- 3 Paid for August advertising in various sports magazines, \$1,500.
- 4 Rendered services for various groups for cash, \$16,750.
- 5 Billed the Canadian Ministry of Natural Resources for services in transporting mapping personnel, \$3,900.
- 6 Received \$20,400 on account from clients.
- 7 Paid \$1,700 on accounts payable.
- 8 Billed various clients for services, \$19,400.
- 9 Paid interest on an outstanding note payable for August, \$75.
- 10 Paid August wages, \$14,800.
- 11 Received invoice for the cost of fuel used during August, \$3,600.
- 12 Paid a cash dividend, \$4,500 (debit Retained Earnings).

Required

- a. Set up accounts for each item in the August 1 trial balance and enter the beginning balances. Also provide similar accounts for the following items: Service Fees Earned, Wages Expense, Advertising Expense, Rent Expense, Fuel Expense, Insurance Expense, and Interest Expense. Record the transactions for August in the accounts, using the dates given.
- b. Prepare a trial balance as of August 31, 2010.

LO4, LO5, LO6 P3-15B. Transaction Analysis and Trial Balance



William Groff opened a tax practice on June 1. The following accounts will be needed to record the business’s transactions for June: Cash; Accounts Receivable; Office Supplies; Tax Library; Office Furniture and Fixtures; Notes Payable; Accounts Payable; Common Stock; Dividends; Professional Fees Earned; Rent Expense; Salaries Expense; Advertising Expense; Utilities Expense; and Interest Expense. The following transactions occurred in June:

- June 1 Groff opened a business checking account at a local bank, investing \$20,000 in his practice in exchange for common stock.
- 2 Purchased office furniture and fixtures for \$9,800, paid \$2,800 cash, and gave a note payable for the balance.
- 3 Purchased books and software for a tax library on account, \$5,700.
- 4 Purchased office supplies for cash, \$560.
- 5 Paid rent for June, \$950.
- 6 Returned \$300 of books with defective bindings. The return reduced the amount owed to the supplier.
- 7 Billed clients for professional services rendered, \$17,600.

- 8 Paid \$1,700 on account for the library items purchased on June 3.
- 9 Collected \$15,900 on account from clients billed on June 7.
- 10 Paid June salaries, \$4,900.
- 11 Received an invoice for June advertising, to be paid in July, \$300.
- 12 The business paid stockholders a cash dividend of \$800.
- 13 Paid utilities for June, \$160.
- 14 Paid interest for June on an outstanding note payable, \$60.

Required

- a. Record the above transactions in T-accounts, and key entries with the numbers of the transactions.
- b. Prepare a trial balance from the general ledger as of June 30.

P3-16B. Transaction Analysis and the Effect of Errors on Trial Balance

LO4, LO5, LO6

The following T-accounts contain numbered entries for the May transactions of the Claremont Corporation, an architectural firm, which opened its offices on May 1:

Cash				Accounts Payable			
(1)	50,000	1,400	(4)	(5)	310	1,530	(3)
(10)	5,200	5,950	(7)	(8)	1,000	290	(9)
		1,000	(8)				
Accounts Receivable				Common Stock			
(6)	8,750	5,200	(10)			50,000	(1)
Supplies				Professional Fees Earned			
(3)	1,530	310	(5)			8,750	(6)
Office Equipment				Rent Expense			
(2)	5,000			(4)	1,400		
Notes Payable				Utilities Expense			
		5,000	(2)	(9)	290		
Salaries Expense							
(7)	5,950						

Required

- a. Give a description of each of the 10 numbered transactions entered in the above accounts. Example: (1) Claremont Corporation issued common stock for cash, \$50,000.
- b. The following trial balance, prepared for Claremont Corporation as of May 31, contains several errors. Itemize the errors, and indicate the correct totals for the trial balance.

CLAREMONT CORPORATION		
Unadjusted Trial Balance		
May 31, 2010		
	Debit	Credit
Cash	\$ 91,850	
Accounts receivable	3,550	
Supplies	1,220	
Office equipment		\$ 5,000
Notes payable		50,000
Accounts payable		510
Common stock		50,000
Professional fees earned		8,570
Rent expense	1,400	
Utilities expense	290	
Salaries expense	5,950	
Totals	<u>\$104,260</u>	<u>\$114,080</u>

P3-17B. Transaction Analysis and Trial Balance

LO5, LO6

Walsh & Company, electrical contractors, began operations on May 1. The following transactions occurred during the month of May:

- May
- 1 Stockholders invested \$50,000 in the business in exchange for common stock.
 - 2 Purchased equipment on account, \$4,200.
 - 3 Returned \$200 of equipment that was not satisfactory. The return reduced the amount owed to the supplier.
 - 4 Purchased supplies on account, \$860.
 - 5 Purchased a truck for \$10,500. Walsh paid \$5,500 cash and gave a note payable for the balance.
 - 6 Paid rent for May, \$875.
 - 7 Paid fuel cost for truck, \$60.
 - 8 Billed customers for services rendered, \$13,700.
 - 9 Paid \$3,000 on account for equipment purchased on May 2.
 - 10 Paid utilities for May, \$210.
 - 11 Received invoice for May advertising, to be paid in June, \$280.
 - 12 Paid employees' wages, \$3,350.
 - 13 Collected \$8,600 on accounts receivable.
 - 14 Walsh paid stockholders a dividend of \$1,500 cash.
 - 15 Paid interest for May on an outstanding note payable, \$80.

Required

- a. Record the above transactions in T-accounts, and key entries with the numbers of the transactions. The following accounts will be needed to record the transactions for May: Cash; Accounts Receivable; Supplies; Equipment; Truck; Notes Payable; Accounts Payable; Common Stock; Dividends; Service Revenue; Rent Expense; Wages Expense; Utilities Expense; Truck Expense; Advertising Expense; and Interest Expense.
- b. Prepare a trial balance as of May 31.

SERIAL PROBLEM: KATE'S CARDS

(Note: This is a continuation of the Serial Problem: Kate's Cards from Chapters 1 and 2.)

SP3. In September 2010, Kate incorporated Kate's Cards and began the process of getting her business up and running. She was a little worried about some of the practices of Fred Abbott, the CEO of Sentiments, and decided that an association with Sentiments could damage the reputation of her own company. Kate is very concerned that her business be viewed as socially responsible and any damage to her reputation at this early stage could prove very difficult to overcome. She therefore decided to concentrate her efforts on producing a quality product that consumers would be proud to purchase and send to their loved ones. The following events occurred during the month of September 2010:

1. Kate deposited \$10,000 that she had saved into a newly opened business checking account. She received common stock in exchange.
2. Kate designed a brochure that she will use to promote her greeting cards at local stationery stores.
3. Kate paid Fred Simmons \$50 to critique her brochure before undertaking her final design and printing.
4. Kate purchased a new iMac computer tablet, specialized graphic arts software, and commercial printer for the company, paying \$4,800 in cash. She decided to record all of these items under the same equipment account.
5. Kate purchased supplies such as paper and ink for \$350 at the local stationery store. She opened a business account with the store and was granted 30 days credit on all purchases, including the one she just made.
6. Kate designed her first 5 cards and prepared to show them to potential customers.
7. The owner of the stationery store where Kate opened her account was impressed with Kate's work and ordered 1,000 of each of the five card designs at a cost of \$1 per card, or \$5,000 total. Kate tells the customer that she will have them printed and delivered within the week.
8. Kate purchased additional supplies, on account, in the amount of \$1,500.
9. Kate delivered the 5,000 cards. Because the owner knows that Kate is just starting out, he paid her immediately in cash. He informed her that if the cards sell well that he will be

- ordering more, but would expect a 30-day credit period like the one he grants to his own business customers.
10. The cost to Kate for the order was \$1,750 of the supplies she had purchased. (*Hint:* This cost should be recorded as a debit to and expense called Cost of Goods Sold.)
 11. Kate paid her balance due for the supplies in full.
 12. Kate decided that she should have special renters' insurance to cover the business equipment she now owns. She purchased a one-year policy for \$1,200, paying the entire amount in cash.
 13. Kate determined that all of her equipment will have a useful life of 4 years (48 months) at which time it will not have any resale or scrap value. (*Hint:* Kate will expense 1/48th of the cost of the equipment each month to Depreciation Expense. The credit will be to Accumulated Depreciation.)
 14. Kate paid herself a salary of \$1,000 for the month.

Required:

- a. Prepare a general ledger with the following accounts: Cash; Accounts Receivable; Supplies Inventory; Prepaid Insurance; Equipment; Accumulated Depreciation; Accounts Payable; Common Stock; Retained Earnings; Sales Revenue; Cost of Goods Sold; Consulting Expense; Insurance Expense; Depreciation Expense; Wages Expense. Prepare journal entries for the above transactions using these accounts.
- b. Post the accounting transactions for the month of September 2010 to the general ledger T-accounts.
- c. Prepare a trial balance for Kate's Cards as of September 30, 2010.

EXTENDING YOUR KNOWLEDGE

REPORTING AND ANALYSIS

EYK3-1. Financial Reporting Problem: Columbia Sportswear Company

The financial statements for the **Columbia Sportswear Company** can be found in Appendix A at the end of this book. The following selected accounts, in thousands, are from those statements:

COLUMBIA SPORTSWEAR COMPANY

Common stock	\$ 836
Accounts payable	102,494
Accounts receivable	226,548
Inventories	222,161
Prepaid expenses and other current assets	32,030
Property, plant, and equipment	235,440
Net sales	1,244,023

Required

- a. For each of these accounts, indicate whether a debit or a credit is required to increase its balance.
- b. What other account is likely involved when:
 1. Accounts receivable is increased?
 2. Accounts payable is decreased?
 3. Net sales are increased?

EYK3-2. Comparative Analysis Problem: Columbia Sportswear Company vs. The Timberland Company

The financial statements for the **Columbia Sportswear Company** can be found in Appendix A and **The Timberland Company**'s financial statements can be found in Appendix B at the end of this book.

COLUMBIA SPORTSWEAR COMPANY
THE TIMBERLAND COMPANY

Required

- a. Each of the following accounts is listed in the company's financial statements:

Columbia Sportswear		The Timberland Company	
1	Accounts receivable	1	Inventory
2	Property, plant, and equipment	2	Provision for income taxes
3	Accounts payable	3	Income taxes payable
4	Common stock	4	Retained earnings
5	Interest income	5	Cost of goods sold

Determine the normal balance (debit or credit) for each of the accounts listed above.

- b. Identify the probable other account involved when:
1. Common stock is increased.
 2. Interest income is increased.
 3. Accounts receivable is decreased.
 4. Income taxes payable is increased.

EYK3-3. Business Decision Problem

Sarah Penney operates the Wildlife Picture Gallery, selling original art and signed prints received on consignment (rather than purchased) from recognized wildlife artists throughout the country. The firm receives a 30 percent commission on all art sold and remits 70 percent of the sales price to the artist. All art is sold on a cash basis.

Sarah began the business on March 1, 2010. She received a \$10,000 loan from a relative to help her get started. Sarah signed a note agreeing to repay the loan in one year. No interest is being charged on the loan, but the relative does expect to receive a set of financial statements each month. On April 1, 2010, Sarah asks for your help in preparing the financial statements for the first month.

Sarah has carefully kept the firm’s checking account up to date and provides you with the following complete listing of the cash receipts and disbursements for March 2010:

Cash Receipts	
Original investment by Sarah Penney in exchange for common stock	\$ 6,500
Loan from relative	10,000
Sales of art	95,000
	<hr/>
Total cash receipts	\$111,500
Cash Disbursements	
Payments to artists for sales made	\$ 54,000
Payment of March rent for gallery space	900
Payment of March staff wages	4,900
Payment of airfare for personal vacation of Sarah Penney (vacation will be taken in April) ..	500
	<hr/>
Total cash disbursements	60,300
Cash balance, March 31, 2010	<u>\$ 51,200</u>

Sarah also gives you the following documents she has received:

1. A \$350 invoice for March utilities; payment is due by April 15, 2010.
2. A \$1,700 invoice from Careful Express for the shipping of the artwork sold during March; payment is due by April 10, 2010.
3. The one-year lease she signed for the gallery space; as an incentive to sign the lease, the landlord reduced the first month’s rent by 25 percent; the monthly rent starting in April is \$1,200.

In your discussions with Sarah, she tells you that she has been so busy that she is behind in sending artists their share of the sales proceeds. She plans to catch up within the next week.

Required

From the above information, prepare the following financial statements for Wildlife Picture Gallery: (a) income statement for the month of March 2010; (b) statement of stockholders’ equity for the month of March 2010; and (c) balance sheet as of March 31, 2010. To obtain the data needed, you may wish to use T-accounts to construct the company’s accounts.

EYK3-4. Financial Analysis Problem

Tim Johnson runs a local photography studio, Action Images, Inc. Action Images is organized as a corporation. Tim’s primary sources of revenue are from the events he is contracted to photograph, mostly sporting events, and from photography lessons given at a local community college. Most of Tim’s photographic event customers pay him soon after they receive an invoice from Tim, approximately one week after the event, although in some cases Tim receives

payment on the day of the event. The community college pays Tim at the end of each month that he teaches a class. Tim maintains the following accounts to account for these revenue transactions: Cash, Accounts Receivable, Photographic Revenue, Teaching Revenue.

Tim leases the studio where he does most of his work. He owns all his equipment, which consists of cameras, lenses, lighting, a computer, printer, furniture, and miscellaneous office equipment. These assets are accounted for in the following accounts: Photographic Equipment, Office Equipment, and Furniture.

Tim does most of the work himself, but he does employ part-time help on days of his photo events, and he also employs a part-time bookkeeper. Most months Tim has expenses for the studio rent, utilities, advertising, supplies, and insurance. The following accounts are used to account for these expenses: Rent Expense, Utilities Expense, Salaries Expense, Advertising Expense, Supplies Expense, and Insurance Expense.

Tim pays himself a monthly salary. In addition, if his business does well, he will receive a dividend from Action Images. The following stockholders' equity accounts are maintained by Tim: Common Stock and Retained Earnings.

During the month of November, Tim hired a new bookkeeper while his regular bookkeeper was away on vacation. The new bookkeeper was inexperienced, and Tim is concerned that things may not have been recorded correctly. He has asked you to review the following transactions. For each transaction, Tim provides you with the account, the amount either debited or credited, and an explanation for the transaction. In each case, the explanation is correct.

	Account	Debit	Credit
1	Cash	5,000	
	Photographic revenue		5,000
	<i>Issued common stock in exchange for cash.</i>		
2	Cash	2,000	
	Teaching revenue		2,000
	<i>Received \$2,000 from the community college for course taught.</i>		
3	Cash	4,500	
	Accounts receivable		5,400
	<i>Received \$4,500 from customers for work done last month.</i>		
4	Photographic equipment	1,600	
	Cash		1,600
	<i>Purchase of a new camera for \$1,600.</i>		
5	Utilities expense	3,000	
	Cash		3,000
	<i>To pay the month's rent on the studio.</i>		
6	Supplies expense	150	
	Accounts receivable		150
	<i>Purchased printing supplies on account.</i>		
7	Salaries expense	3,000	
	Cash		3,000
	<i>Paid the salaries for the month.</i>		

Required

- For each entry, state if it is correct. If the entry is in error, make the necessary correction.
- Will any of the errors cause the trial balance to be out of balance?
- What effect did the errors have on Tim's net income for November?

CRITICAL THINKING

EYK3-5. Accounting Research Problem

Go to this book's Website and locate the annual report of **General Mills, Inc.** for the year ending May 30, 2010 (fiscal year 2010).

GENERAL MILLS, INC.

Required

- For each of the income statement accounts, indicate the normal balance.
- For each of the balance sheet accounts, indicate the normal balance.

**EYK3-6. Accounting Communication Activity**

Fred Jones is struggling with some accounting concepts and has come to you for help. In particular he does not understand what is meant by a permanent or a temporary account. He was especially confused when he learned that revenue is considered a temporary account, even though it appears every year on the income statement.

Required

Write a short memorandum to Fred that explains what is meant by temporary and permanent as it applies to accounts used by a company.

**EYK3-7. Accounting Ethics Case**

Andy Frame and his supervisor are sent on an out-of-town assignment by their employer. At the supervisor's suggestion, they stay at the Spartan Inn, across the street from the Luxury Inn. After three days of work, they settle their lodging bills and leave. On the return trip, the supervisor gives Andy what appears to be a copy of a receipt from the Luxury Inn for three nights of lodging. Actually, the supervisor indicates that he prepared the Luxury Inn receipt on his office computer and plans to complete his expense reimbursement request using the higher lodging costs from the Luxury Inn.

Required

What are the ethical considerations that Andy faces when he prepares his expense reimbursement request?

EYK3-8. Corporate Social Responsibility Problem

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework. The GRI Website is located at <http://www.globalreporting.org/Home>. Sustainability reporting differs from financial reporting in several areas. One difference that is readily apparent is that sustainability reports contain performance metrics that are measured in units other than dollars. For example, greenhouse emissions may be measured in metric tons and employee in-kind volunteering may be measured in hours.

Required

Go to the GRI Website and select the GRI Reports tab located near the center top of the Home Page. Continue on to select a report of one of the listed firms. What are some of the areas that the company reports on, and what measures do they use?

**EYK3-9. Forensic Accounting Problem**

Accrual accounting is based on the idea that revenue should be recognized when earned and that any resources consumed in the revenue-generating process (expenses) should be matched with those revenues in the same period. Another basic principle on which GAAP is based is that of the accounting period. This principle sets the time period for which the revenues and expenses are to be measured and matched. For many firms, this date is December 31. Revenues earned after December 31 are to be reported in the following period, and expenses in the following period are then matched to those revenues. One way that companies have been found to misrepresent their reported performance is to violate these principles by "holding the books open" beyond December 31. In other words, the firm will improperly record revenue earned after year-end as if it were earned in the current year, and at the same time, fail to properly match the expenses associated with those revenues. How might a forensic accountant who has been hired to investigate improper financial reporting catch this type of activity?

**EYK3-10. IFRS Financial Statements**

Thomson Reuters is a global information company created by the 2008 merger of the Thomson Corporation, a Canadian company, with the Reuters Company, a United Kingdom-based company. The company operates in over 100 countries and has over 50,000 employees. The company provides financial, legal, scientific, and tax information services to the public on a fee basis. The shares of Thomson Reuters are listed on the New York Stock Exchange and the Toronto Stock Exchange. The company prepares its financial statements using Canadian GAAP but also reconciles them to IFRS. In 2008, the company reported net earnings of \$1.405 billion U.S. dollars under Canadian GAAP but only \$1.332 billion U.S. dollars under IFRS, a difference of over \$73 million. You can view the company's financial statements and the Canadian GAAP-IFRS reconciliation at www.thomsonreuters.com.

Required

1. What are the advantages of having a single, global set of accounting standards like IFRS?
2. A competitor of Thomson Reuters is U.S.-based Bloomberg L.P, a closely held financial software, news and data company founded by Michael Bloomberg, mayor of New York City. Bloomberg prepares its financial statements using U.S. GAAP. What constraints would you face in trying to compare the financial results of Thomson Reuters to Bloomberg?

ANSWERS TO SELF-STUDY QUESTIONS:

1. d, (pp. 102–106) 2. a, (pp. 102–106) 3. b, (pp. 102–106) 4. c, (pp. 107–108) 5. b, (p. 108)
 6. d, (p. 109) 7. a, (p. 109) 8. c, (p. 109) 9. d, (p. 109) 10. a, (p. 109) 11. d, (p. 117)
 12. d, (p. 118) 13. d, (p. 111) 14. a, (pp. 111–112) 15. c, (p. 100) 16. d, (p. 103)

Your Turn! Solutions

Solution 3.1

	Cash	+	Accounts Receivable	+	Equipment	=	Accounts Payable	+	Notes Payable	+	Common Stock	+	Retained Earnings
a.	\$ 5,000	+	\$ 5,200	+	\$ 0	=	\$1,000	+	\$2,500	+	\$5,500	+	\$1,200
b.	(1) -600						-600						
	(2) -3,600												-3,600
	(3)		+11,500										+11,500
	(4)						+500						-500
	(5) +10,000		-10,000										
	(6) -2,400												-2,400
	(7)						+680						-680
	(8) -20												-20
	(9) -900												-900
	(10) -4,000				+4,000								
	<u>\$ 3,480</u>	+	<u>\$ 6,700</u>	+	<u>\$4,000</u>	=	<u>\$1,580</u>	+	<u>\$2,500</u>	+	<u>\$5,500</u>	+	<u>4,600</u>
	\$14,180						\$14,180						

Solution 3.2

- a. Debit, permanent
- b. Credit, permanent
- c. Debit, temporary
- d. Credit, permanent
- e. Debit, temporary
- f. Credit, temporary
- g. Debit, permanent

Solution 3.3

1.	Assets			=	Liabilities		Equity							
	Cash	+	Accounts Receivable		+	Office Supplies	Accounts Payable	+	Retained Earnings					
a.	\$ 1,300	+	\$ 0	+	\$ 0	=	\$ 0	+	\$1,300	+	\$ 0	+	\$ 0	Service revenue
b.	-2,400										-2,400			Wages expense
c.	600		-600											
d.	-400												-400	Dividends
e.					700		700							
f.			900						900					Service revenue
g.	-500						-500							

2.	a.	Cash	1,300	
		Service revenue <i>Revenue payment for service rendered.</i>		1,300
	b.	Wages expense	2,400	
		Cash <i>Paid employee wages.</i>		2,400
	c.	Cash	600	
		Accounts receivable <i>Received payment from clients.</i>		600
	d.	Dividends	400	
		Cash <i>Paid cash dividend.</i>		400
	e.	Office supplies	700	
		Accounts payable <i>Purchased office supplies on account.</i>		700
	f.	Accounts receivable	900	
		Service revenue <i>Billed clients for services rendered.</i>		900
	g.	Accounts payable	500	
		Cash <i>Paid suppliers.</i>		500

3.				Cash				Accounts Receivable			
(a)	1,300	2,400	(b)	(f)	900	600	(c)				
(c)	600	400	(d)								
		500	(g)								
Office Supplies				Accounts Payable							
(e)	700			(g)	500	700	(e)				
Service Revenue				Wages Expense							
		1,300	(a)	(b)	2,400						
		900	(f)								
Dividends											
(d)	400										

Solution 3.4

Devin Company Trial Balance December 31, 2011			Debit	Credit
Cash	\$	1,500		
Accounts receivable		4,500		
Inventory		3,750		
Property, plant, and equipment		11,250		
Accounts payable				\$ 2,250
Notes payable				6,000
Common stock				7,500
Dividends		1,500		
Sales revenue				12,000
Salary expense		4,500		
Administrative expenses		750		
Totals		<u>\$27,750</u>	<u>\$27,750</u>	

