

# Analyzing Business Transactions

## Chapter 2



Rollin King and Herb Kelleher had a simple notion when they got into the airline business: “If you get your passengers to their destinations when they want to get there, on time, at the lowest possible fares, and make darn sure they have a good time doing it, people will fly your airline.”

Today, Southwest has become one of the most profitable airlines—posting a profit for the 40th consecutive year in a row! However, running an airline is no easy task. Think of all of the financial transactions that take place on a daily basis. The airline has to buy planes, equipment, and supplies—like those peanuts we are so fond of. It also has to pay employees, pay for repairs on their equipment, and buy insurance, just to name a few expenses. Then, it has to sell enough tickets in order to be able to generate money to pay for all of these things. Yikes. That is a lot of cash coming in and going out. With an emphasis on customer service, Southwest has a reputation of being fun, quirky, and having a sense of humor. You never know what might happen when you board a Southwest flight but you know you’ll have a good time.



### thinking critically

How does Southwest keep track of all of these transactions so that it can continue to run its airlines profitably?

#### LEARNING OBJECTIVES

- 2-1.** Record in equation form the financial effects of a business transaction.
- 2-2.** Define, identify, and understand the relationship between asset, liability, and owner’s equity accounts.
- 2-3.** Analyze the effects of business transactions on a firm’s assets, liabilities, and owner’s equity and record these effects in accounting equation form.
- 2-4.** Prepare an income statement.
- 2-5.** Prepare a statement of owner’s equity and a balance sheet.
- 2-6.** Define the accounting terms new to this chapter.

#### NEW TERMS

<b>accounts payable</b>	<b>equation</b>
<b>accounts receivable</b>	<b>income statement</b>
<b>assets</b>	<b>liabilities</b>
<b>balance sheet</b>	<b>net income</b>
<b>break even</b>	<b>net loss</b>
<b>business transaction</b>	<b>on account</b>
<b>capital</b>	<b>owner’s equity</b>
<b>equity</b>	<b>revenue</b>
<b>expense</b>	<b>statement of owner’s equity</b>
<b>fair market value</b>	<b>equity</b>
<b>fundamental accounting</b>	<b>withdrawals</b>

## Section 1

SECTION OBJECTIVES	TERMS TO LEARN
<p>&gt;&gt; 2-1. Record in equation form the financial effects of a business transaction.</p> <p><b>WHY IT'S IMPORTANT</b> Learning the fundamental accounting equation is a basis for understanding business transactions.</p> <p>&gt;&gt; 2-2. Define, identify, and understand the relationship between asset, liability, and owner's equity accounts.</p> <p><b>WHY IT'S IMPORTANT</b> The relationship between assets, liabilities, and owner's equity is the basis for the entire accounting system.</p>	<p>accounts payable</p> <p>assets</p> <p>balance sheet</p> <p>business transaction</p> <p>capital</p> <p>equity</p> <p>liabilities</p> <p>on account</p> <p>owner's equity</p>

# Property and Financial Interest

The accounting process starts with the analysis of business transactions. A **business transaction** is any financial event that changes the resources of a firm. For example, purchases, sales, payments, and receipts of cash are all business transactions. The accountant analyzes each business transaction to decide what information to record and where to record it.

### >>2-1. OBJECTIVE

Record in equation form the financial effects of a business transaction.

## Beginning with Analysis

Let's analyze the transactions of Wells' Consulting Services, a firm that provides a wide range of accounting and consulting services. Carolyn Wells, CPA, has a master's degree in accounting. She is the sole proprietor of Wells' Consulting Services. Carlos Valdez, the office manager, has an associate's degree in business and has taken 12 semester hours of accounting. The firm is located in a large office complex.

Every month, Wells' Consulting Services bills clients for the accounting and consulting services provided that month. Customers can also pay in cash when the services are rendered.

## STARTING A BUSINESS

Let's start from the beginning. Carolyn Wells obtained the funds to start the business by withdrawing \$100,000 from her personal savings account. The first transaction of the new business was opening a checking account in the name of Wells' Consulting Services. The separate bank account helps Wells keep her financial interest in the business separate from her personal funds.

When a business transaction occurs, it is analyzed to identify how it affects the equation *property equals financial interest*. This equation reflects the fact that in a free enterprise system, all property is owned by someone. In this case, Wells owns the business because she supplied the property (cash).

Use these steps to analyze the effect of a business transaction:

1. Describe the financial event.
  - Identify the property.
  - Identify who owns the property.
  - Determine the amount of increase or decrease.

2. Make sure the equation is in balance.

<b>Property</b>	=	<b>Financial Interest</b>
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### BUSINESS TRANSACTION

Carolyn Wells withdrew \$100,000 from personal savings and deposited it in a new checking account in the name of Wells' Consulting Services.

#### ANALYSIS

- a. The business received \$100,000 of *property* in the form of cash.
- a. Wells had a \$100,000 *financial interest* in the business.

Note that the equation *property equals financial interest* remains in balance. The total of one side of the equation must always equal the total of the other side.

Property	=	Financial Interest
Cash	=	Carolyn Wells, Capital
(a) Invested cash		
+\$100,000		
(a) Increased equity		+\$100,000
New balances	=	\$100,000
\$100,000		

An owner's financial interest in the business is called **equity**, or **capital**. Carolyn Wells has \$100,000 equity in Wells' Consulting Services.

### PURCHASING EQUIPMENT FOR CASH

The first priority for office manager Carlos Valdez was to get the business ready for opening day on December 1.

### BUSINESS TRANSACTION

Wells' Consulting Services issued a \$5,000 check to purchase a computer and other equipment.

#### ANALYSIS

- b. The firm purchased new property (equipment) for \$5,000.
- b. The firm paid out \$5,000 in cash.

The equation remains in balance.

Property	=			Financial Interest
	Cash	+	Equipment	
Previous balances	\$100,000			\$100,000
(b) Purchased equipment		+	\$5,000	
(b) Paid cash	−5,000			
New balances	\$95,000	+	\$5,000	= \$100,000

Notice that there is a change in the composition of the firm’s property. Now the firm has cash and equipment. The equation shows that the total value of the property remains the same, \$100,000. Carolyn Wells’ financial interest, or equity, is also unchanged. Note that property (Cash and Equipment) is equal to financial interest (Carolyn Wells, Capital).

These activities are recorded for the business entity Wells’ Consulting Services. Carolyn Wells’ personal assets, such as her personal bank account, house, furniture, and automobile, are kept separate from the property of the firm. Nonbusiness property is not included in the accounting records of the business entity.

### PURCHASING EQUIPMENT ON CREDIT

Valdez purchased additional office equipment. Office Plus, the store selling the equipment, allows Wells’ Consulting Services 60 days to pay the bill. This arrangement is called buying **on account**. The business has a *charge account*, or *open-account credit*, with its suppliers. Amounts that a business must pay in the future are known as **accounts payable**. The companies or individuals to whom the amounts are owed are called *creditors*.

## BUSINESS TRANSACTION

Wells’ Consulting Services purchased office equipment on account from Office Plus for \$6,000.

### ANALYSIS

- c. The firm purchased new property (equipment) that cost \$6,000.
  - c. The firm owes \$6,000 to Office Plus.
- The equation remains in balance.

## ABOUT ACCOUNTING

### History

For as long as people have been involved in business, there has been a need for accounting. The system of accounting we use is based upon the works of Luca Pacioli, a Franciscan monk in Italy. In 1494, Pacioli wrote about the bookkeeping techniques in practice during his time.

	Property			=	Financial Interest	
	Cash	+	Equipment	=	Accounts Payable	+ Carolyn Wells, Capital
Previous balances	\$95,000	+	\$ 5,000	=		\$100,000
(c) Purchased equip.		+	6,000	=		
(c) Incurred debt					+ \$6,000	
New balances	\$95,000	+	\$11,000	=	\$6,000	+ \$100,000

Office Plus is willing to accept a claim against Wells’ Consulting Services until the bill is paid. Now there are two different financial interests or claims against the firm’s property—the creditor’s claim (Accounts Payable) and the owner’s claim (Carolyn Wells, Capital). Notice

that the total property increases to \$106,000. Cash is \$95,000 and equipment is \$11,000. Carolyn Wells, Capital stays the same; but the creditor's claim increases to \$6,000. After this transaction is recorded, the left side of the equation still equals the right side.

When Ben Cohen and Jerry Greenfield founded Ben & Jerry's Homemade Ice Cream, Inc., in 1978, they invested \$8,000 of their own funds and borrowed funds of \$4,000. The equation *property equals financial interest* is expressed as

<b>Property</b>	=	<b>Financial Interest</b>
<i>cash</i>	=	<i>creditors' claims</i>
		+ <i>owners' claims</i>
\$12,000	=	\$ 4,000
		<u>+ 8,000</u>
		\$12,000

### PURCHASING SUPPLIES

Valdez purchased supplies so that Wells' Consulting Services could start operations. The company that sold the items requires cash payments from companies that have been in business less than six months.

### BUSINESS TRANSACTION

Wells' Consulting Services issued a check for \$1,500 to Office Delux, Inc., to purchase office supplies.

#### ANALYSIS

- d. The firm purchased office supplies that cost \$1,500.
  - d. The firm paid \$1,500 in cash.
- The equation remains in balance.

	Property				=	Financial Interest			
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	Carolyn Wells, Capital
Previous balances	\$95,000			+	\$11,000	=	\$6,000	+	\$100,000
(d) Purchased supplies		+	\$ 1,500						
(d) Paid cash	-\$1,500								
New balances	\$93,500	+	\$1,500	+	\$11,000	=	\$6,000	+	\$100,000

Notice that total property remains the same, even though the form of the property has changed. Also note that all of the property (left side) equals all of the financial interests (right side).

### PAYING A CREDITOR

Valdez decided to reduce the firm's debt to Office Plus by \$2,500.

**BUSINESS TRANSACTION**

Wells' Consulting Services issued a check for \$2,500 to Office Plus.

**ANALYSIS**

- e. The firm paid \$2,500 in cash.
  - e. The claim of Office Plus against the firm decreased by \$2,500.
- The equation remains in balance.

	Property					=	Financial Interest		
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	Carolyn Wells, Capital
Previous balances	\$93,500	+	\$1,500	+	\$11,000	=	\$6,000	+	\$100,000
(e) Paid cash	-\$2,500								
(e) Decreased debt							-\$2,500		
New balances	\$91,000	+	\$1,500	+	\$11,000	=	\$3,500	+	\$100,000

**RENTING FACILITIES**

In November, Valdez arranged to rent facilities for \$4,000 per month, beginning in December. The landlord required that rent for the first two months—December and January—be paid in advance. The firm prepaid (paid in advance) the rent for two months. As a result, the firm obtained the right to occupy facilities for a two-month period. In accounting, this right is considered a form of property.

**BUSINESS TRANSACTION**

Wells' Consulting Services issued a check for \$8,000 to pay for rent for the months of December and January.

**ANALYSIS**

- f. The firm prepaid the rent for the next two months in the amount of \$8,000.
  - f. The firm decreased its cash balance by \$8,000.
- The equation remains in balance.

	Property					=	Financial Interest				
	Cash	+	Supplies	+	Prepaid Rent	+	Equipment	=	Accounts Payable	+	Carolyn Wells, Capital
Previous balances	\$91,000	+	\$1,500			+	\$11,000	=	\$3,500	+	\$100,000
(f) Paid cash	-\$8,000										
(f) Prepaid rent					+\$8,000						
New balances	\$83,000	+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$100,000

Notice that when property values and financial interests increase or decrease, the total of the items on one side of the equation still equals the total on the other side.

<b>Property</b>		=	<b>Financial Interest</b>	
Cash	\$ 83,000		Accounts Payable	\$ 3,500
Supplies	1,500		Carolyn Wells, Capital	100,000
Prepaid Rent	8,000			
Equipment	11,000			
<b>Total</b>	<b>\$103,500</b>		<b>Total</b>	<b>\$103,500</b>

The balance sheet is also called the *statement of financial position*. Caterpillar Inc. reported assets of \$89.4 billion, liabilities of \$71.8 billion, and owners' equity of \$17.6 billion on its statement of financial position at December 31, 2012.

## Assets, Liabilities, and Owner's Equity

Accountants use special accounting terms when they refer to property and financial interests. For example, they refer to the property that a business owns as **assets** and to the debts or obligations of the business as **liabilities**. The owner's financial interest is called **owner's equity**. (Sometimes owner's equity is called *proprietorship* or *net worth*. Owner's equity is the preferred term and is used throughout this book.) At regular intervals, Wells reviews the status of the firm's assets, liabilities, and owner's equity in a financial statement called a **balance sheet**. The balance sheet shows the firm's financial position on a given date. Figure 2.1 shows the firm's balance sheet on November 30, the day before the company opened for business.

### >>2-2. OBJECTIVE

Define, identify, and understand the relationship between asset, liability, and owner's equity accounts.

The assets are listed on the left side of the balance sheet and the liabilities and owner's equity are on the right side. This arrangement is similar to the equation *property equals financial interest*. Property is shown on the left side of the equation, and financial interest appears on the right side.

The balance sheet in Figure 2.1 shows:

- the amount and types of property the business owns,
- the amount owed to creditors,
- the owner's interest.

This statement gives Carolyn Wells a complete picture of the financial position of her business on November 30.

**FIGURE 2.1** Balance Sheet for Wells' Consulting Services

Wells' Consulting Services									
Balance Sheet									
November 30, 2016									
Assets					Liabilities				
Cash	83	00	00	00	Accounts Payable	3	50	00	00
Supplies	1	50	00	00					
Prepaid Rent	8	00	00	00					
Equipment	11	00	00	00	Carolyn Wells, Capital	100	00	00	00
<b>Total Assets</b>	<b>103</b>	<b>50</b>	<b>00</b>	<b>00</b>	<b>Total Liabilities and Owner's Equity</b>	<b>103</b>	<b>50</b>	<b>00</b>	<b>00</b>

## Section 1 Self Review

### QUESTIONS

- Describe a transaction that increases an asset and the owner's equity.
- What does the term "accounts payable" mean?
- What is a business transaction?

### EXERCISES

- John Ellis began a new business by depositing \$150,000 in the business bank account. He wrote two checks from the business account: \$24,000 for office furniture and \$8,000 for office supplies. What is his financial interest in the company?
  - \$122,000
  - \$118,000
  - \$126,000
  - \$150,000
- Teresa Wells purchased a computer for \$2,950 on account for her business. What is the effect of this transaction?
  - Equipment increase of \$2,950 and accounts payable increase of \$2,950.
  - Equipment decrease of \$2,950 and accounts payable increase of \$2,950.
  - Equipment increase of \$2,950 and cash increase of \$2,950.
  - Cash decrease of \$2,950 and owner's equity increase of \$2,950.

### ANALYSIS

- China Import Co. has no liabilities. The asset and owner's equity balances are as follows. What is the balance of "Supplies"?

Cash	\$ 50,000
Office Equipment	\$ 30,000
Supplies	????
John Wong, Capital	\$100,000

(Answers to Section 1 Self Review are on page 50.)

## Section 2

SECTION OBJECTIVES	TERMS TO LEARN
<p>&gt;&gt; 2-3. Analyze the effects of business transactions on a firm's assets, liabilities, and owner's equity and record these effects in accounting equation form.</p> <p><b>WHY IT'S IMPORTANT</b> Property will always equal financial interest.</p> <p>&gt;&gt; 2-4. Prepare an income statement.</p> <p><b>WHY IT'S IMPORTANT</b> The income statement shows the results of operations.</p> <p>&gt;&gt; 2-5. Prepare a statement of owner's equity and a balance sheet.</p> <p><b>WHY IT'S IMPORTANT</b> These financial statements show the financial condition of a business.</p>	<p>accounts receivable</p> <p>break even</p> <p>expense</p> <p>fair market value</p> <p>fundamental accounting equation</p> <p>income statement</p> <p>net income</p> <p>net loss</p> <p>revenue</p> <p>statement of owner's equity</p> <p>withdrawals</p>

# The Accounting Equation and Financial Statements

The word *balance* in the title “balance sheet” has a special meaning. It emphasizes that the total on the left side of the report must equal, or balance, the total on the right side.

## The Fundamental Accounting Equation

In accounting terms, the firm's assets must equal the total of its liabilities and owner's equity. This equality can be expressed in equation form, as illustrated here. The amounts are for Wells' Consulting Services on November 30.

<b>Assets</b>	=	<b>Liabilities</b>	+	<b>Owner's Equity</b>
\$103,500	=	\$3,500	+	\$100,000

The relationship between assets and liabilities plus owner's equity is called the **fundamental accounting equation**. The entire accounting process of analyzing, recording, and reporting business transactions is based on the fundamental accounting equation.

If any two parts of the equation are known, the third part can be determined. For example, consider the basic accounting equation for Wells' Consulting Services on November 30, with some information missing.

<b>Assets</b>	=	<b>Liabilities</b>	+	<b>Owner's Equity</b>
1. ?	=	\$3,500	+	\$100,000
2. \$103,500	=	?	+	\$100,000
3. \$103,000	=	\$3,500	+	?

In the first case, we can solve for assets by adding liabilities to owner's equity (\$3,500 + \$100,000) to determine that assets are \$103,500. In the second case, we can solve for liabilities by subtracting owner's equity from assets (\$103,500 - \$100,000) to determine that liabilities are \$3,500. In the third case, we can solve for owner's equity by subtracting liabilities from assets (\$103,500 - \$3,500) to determine that owner's equity is \$100,000.

### >> 2-3. OBJECTIVE

Analyze the effects of business transactions on a firm's assets, liabilities, and owner's equity and record these effects in accounting equation form.

### important!

Revenues increase owner's equity.  
Expenses decrease owner's equity.

## EARNING REVENUE AND INCURRING EXPENSES

Wells' Consulting Services opened for business on December 1. Some of the other businesses in the office complex became the firm's first clients. Wells also used her contacts in the community to identify other clients. Providing services to clients started a stream of revenue for the business. **Revenue**, or *income*, is the inflow of money or other assets that results from the sales of goods or services or from the use of money or property. A sale on account does not increase money, but it does create a claim to money. When a sale occurs, the revenue increases assets and also increases owner's equity.

An **expense**, on the other hand, involves the outflow of money, the use of other assets, or the incurring of a liability. Expenses include the costs of any materials, labor, supplies, and services used to produce revenue. Expenses cause a decrease in owner's equity.

A firm's accounting records show increases and decreases in assets, liabilities, and owner's equity as well as details of all transactions involving revenue and expenses. Let's use the fundamental accounting equation to show how revenue and expenses affect the business.

## SELLING SERVICES FOR CASH

During the month of December, Wells' Consulting Services earned a total of \$36,000 in revenue from clients who paid cash for accounting and bookkeeping services. This involved several transactions throughout the month. The total effect of these transactions is analyzed below.

### ANALYSIS

- g. The firm received \$36,000 in cash for services provided to clients.
  - g. Revenues increased by \$36,000, which results in a \$36,000 increase in owner's equity.
- The fundamental accounting equation remains in balance.

	Assets				=	Liabilities	+	Owner's Equity					
	Cash	+	Supplies	+	Prepaid Rent	+	Equipment	=	Accounts Payable	+	Carolyn Wells, Capital	+	Revenue
Previous balances	\$ 83,000	+	\$ 1,500	+	\$ 8,000	+	\$ 11,000	=	\$ 3,500	+	\$ 100,000		
(g) Received cash	<b>+\$36,000</b>												
(g) Increased owner's equity by earning revenue													<b>+\$36,000</b>
New balances	\$119,000	+	\$ 1,500	+	\$ 8,000	+	\$ 11,000	=	\$ 3,500	+	\$ 100,000	+	\$ 36,000
	\$139,500								\$139,500				

Notice that revenue amounts are recorded in a separate column under owner's equity. Keeping revenue separate from the owner's equity will help the firm compute total revenue more easily when the financial statements are prepared.

## SELLING SERVICES ON CREDIT

Wells' Consulting Services has some charge account clients. These clients are allowed 30 days to pay. Amounts owed by these clients are known as **accounts receivable**. This is a new form of asset for the firm—claims for future collection from customers. During December, Wells' Consulting Services earned \$11,000 of revenue from charge account clients. The effect of these transactions is analyzed as follows:

**ANALYSIS**

- h. The firm acquired a new asset, accounts receivable, of \$11,000.  
 h. Revenues increased by \$11,000, which results in an \$11,000 increase in owner's equity.  
 The fundamental accounting equation remains in balance.

	Assets						=	Liab.	+	Owner's Equity					
	Cash	+	Accts. Rec.	+	Supp.	+	Prepaid Rent	+	Equip.	=	Accts. Pay.	+	Carolyn Wells, Capital	+	Rev.
Previous balances	\$119,000			+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$100,000	+	\$36,000
(h) Received new asset—accts. rec.			+	\$11,000											
(h) Increased owner's equity by earning revenue														+	\$11,000
New balances	\$119,000	+	\$11,000	+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$100,000	+	\$47,000
	\$150,500							\$150,500							

**COLLECTING RECEIVABLES**

During December, Wells' Consulting Services received \$6,000 on account from clients who owed money for services previously billed. The effect of these transactions is analyzed below.

**ANALYSIS**

- i. The firm received \$6,000 in cash.  
 i. Accounts receivable decreased by \$6,000.  
 The fundamental accounting equation remains in balance.

	Assets						=	Liab.	+	Owner's Equity					
	Cash	+	Accts. Rec.	+	Supp.	+	Prepaid Rent	+	Equip.	=	Accts. Pay.	+	Carolyn Wells, Capital	+	Rev.
Previous balances	\$119,000	+	\$11,000	+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$100,000	+	\$47,000
(i) Received cash	+\$6,000														
(i) Decreased accounts receivable			-\$6,000												
New balances	\$125,000	+	\$5,000	+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$100,000	+	\$47,000
	\$150,500							\$150,500							

In this type of transaction, one asset is changed for another asset (accounts receivable for cash). Notice that revenue is not increased when cash is collected from charge account clients. The revenue was recorded when the sale on account took place (see entry **(h)**). Notice that the fundamental accounting equation, *assets equal liabilities plus owner's equity*, stays in balance regardless of the changes arising from individual transactions.

### PAYING EMPLOYEES' SALARIES

So far Wells has done very well. Her equity has increased by the revenues earned. However, running a business costs money, and these expenses reduce owner's equity.

During the first month of operations, Wells' Consulting Services hired an accounting clerk. The salaries for the new accounting clerk and the office manager are considered an expense to the firm.

#### BUSINESS TRANSACTION

In December, Wells' Consulting Services paid \$8,000 in salaries for the accounting clerk and Carlos Valdez.

#### ANALYSIS

- j. The firm decreased its cash balance by \$8,000.
- j. The firm paid salaries expense in the amount of \$8,000, which decreased owner's equity. The fundamental accounting equation remains in balance.

	Assets					=	Liab.	+	Owner's Equity									
	Cash	+	Accts Rec.	+	Supp.	+	Prepaid Rent	+	Equip.	=	Accts. Pay.	+	Carolyn Wells, Capital	+	Rev.	-	Exp.	
Previous balances	\$125,000	+	\$5,000	+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$100,000	+	\$47,000			
(j) Paid cash	-\$8,000																	
(j) Decreased owner's equity by incurring salaries exp.																		+ \$8,000
New balances	\$117,000	+	\$5,000	+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$100,000	+	\$47,000	-	\$8,000	
	\$142,500						\$142,500											

Notice that expenses are recorded in a separate column under owner's equity. The separate record of expenses is kept for the same reason that the separate record of revenue is kept—to analyze operations for the period.

### PAYING UTILITIES EXPENSE

At the end of December, the firm received a \$650 utilities bill.

#### BUSINESS TRANSACTION

Wells' Consulting Services issued a check for \$650 to pay the utilities bill.

#### ANALYSIS

- k. The firm decreased its cash balance by \$650.
- k. The firm paid utilities expense of \$650, which decreased owner's equity. The fundamental accounting equation remains in balance.

	Assets						=	Liab.	+	Owner's Equity							
	Cash	+	Accts. Rec.	+	Supp.	+	Prepaid Rent	+	Equip.	=	Accts. Pay.	+	C. Wells, Capital	+	Rev.	-	Exp.
Previous balances	\$117,000	+	\$5,000	+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$100,000	+	\$47,000	-	\$8,000
(k) Paid cash	-\$650																
(k) Decreased owner's equity by utilities exp.																	+\$650
New balances	\$116,350	+	\$5,000	+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$100,000	+	\$47,000	-	\$8,650
	\$141,850							\$141,850									

### EFFECT OF OWNER'S WITHDRAWALS

On December 30, Wells withdrew \$5,000 in cash for personal expenses. **Withdrawals** are funds taken from the business by the owner for personal use. Withdrawals are not a business expense but a decrease in the owner's equity.

### BUSINESS TRANSACTION

Carolyn Wells wrote a check to withdraw \$5,000 cash for personal use.

#### ANALYSIS

- I. The firm decreased its cash balance by \$5,000.
  - I. Owner's equity decreased by \$5,000.
- The fundamental accounting equation remains in balance.

	Assets						=	Liab.	+	Owner's Equity							
	Cash	+	Accts. Rec.	+	Supp.	+	Prepaid Rent	+	Equip.	=	Accts. Pay.	+	Carolyn Wells, Capital	+	Rev.	-	Exp.
Previous balances	\$116,350	+	\$5,000	+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$100,000	+	\$47,000	-	\$8,650
(l) Withdrew cash	-\$5,000																
(l) Decreased owner's equity																	-\$5,000
New balances	\$111,350	+	\$5,000	+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$95,000	+	\$47,000	-	\$8,650
	\$136,850							\$136,850									

### SUMMARY OF TRANSACTIONS

Figure 2.2 on page 34 summarizes the transactions of Wells' Consulting Services through December 31. Notice that after each transaction, the fundamental accounting equation is in balance. Test your understanding by describing the nature of each transaction. Then check your results by referring to the discussion of each transaction.

**FIGURE 2.2** Transactions of Wells' Consulting Services Through December 31, 2016

	Assets						=	Liab.	+	Owner's Equity							
	Cash	+	Accts. Rec.	+	Supp.	+	Prepaid Rent	+	Equip.	=	Accts. Pay.	+	C. Wells, Capital	+	Rev.	-	Exp.
(a)	+ \$100,000												+ \$100,000				
Balances	100,000									=			100,000				
(b)	- 5,000							+ \$5,000									
Balances	95,000							5,000		=			100,000				
(c)								+ 6,000	+ \$6,000								
Balances	95,000							11,000	6,000	=	6,000		100,000				
(d)	- 1,500		+ \$1,500														
Balances	93,500		1,500					11,000		=	6,000		100,000				
(e)	- 2,500										- 2,500						
Balances	91,000		1,500					11,000		=	3,500		100,000				
(f)	- 8,000				+ \$8,000												
Balances	83,000		1,500		8,000			11,000		=	3,500		100,000				
(g)	+ 36,000														+ \$36,000		
Balances	119,000		1,500		8,000			11,000		=	3,500		100,000		36,000		
(h)		+ \$11,000														+ 11,000	
Balances	119,000		11,000		1,500			8,000		=	3,500		100,000		47,000		
(i)	+ 6,000	- 6,000															
Balances	125,000		5,000		1,500			8,000		=	3,500		100,000		47,000		
(j)	- 8,000																+ \$8,000
Balances	117,000		5,000		1,500			8,000		=	3,500		100,000		47,000		8,000
(k)	- 650																+ 650
Balances	116,350		5,000		1,500			8,000		=	3,500		100,000		47,000		8,650
(l)	- 5,000											- 5,000					
Balances	\$111,350		\$5,000		\$1,500		\$8,000		\$11,000	=	\$3,500		\$95,000		\$47,000		\$8,650
	\$136,850										\$136,850						

### The Income Statement

To be meaningful to owners, managers, and other interested parties, financial statements should provide information about revenue and expenses, assets and claims on the assets, and owner's equity.

The **income statement** shows the results of business operations for a specific period of time such as a month, a quarter, or a year. The income statement shows the revenue earned and the expenses of doing business. (The income statement is sometimes called a *profit and loss statement* or a *statement of income and expenses*. The most common term, income statement, is used throughout this text.) Figure 2.3 shows the income statement for Wells' Consulting Services for its first month of operation.

The income statement shows the difference between revenue from services provided or goods sold and the amount spent to operate the business. **Net income** results when revenue is greater than the expenses for the period. When expenses are greater than revenue, the result is a **net loss**. In the rare case when revenue and expenses are equal, the firm is said to **break even**. The income statement in Figure 2.3 shows a net income; revenue is greater than expenses.

The three-line heading of the income statement shows *who*, *what*, and *when*.

#### >>2-4. OBJECTIVE

Prepare an income statement.

### recall

#### Financial Statements

Financial statements are reports that summarize a firm's financial affairs.

Wells' Consulting Services					
Income Statement					
Month Ended December 31, 2016					
Revenue					
Fees Income				4 7 0 0 0 0 0 0	
Expenses					
Salaries Expense	8 0 0 0 0 0				
Utilities Expense	6 5 0 0 0				
Total Expenses				8 6 5 0 0 0	
Net Income				3 8 3 5 0 0	

FIGURE 2.3

Income Statement for Wells' Consulting Services

- Who—the business name appears on the first line.
- What—the report title appears on the second line.
- When—the period covered appears on the third line.

The third line of the income statement heading in Figure 2.3 indicates that the report covers operations for the “Month Ended December 31, 2016.” Review how other time periods are reported on the third line of the income statement heading.

Period Covered	Third Line of Heading
Jan., Feb., Mar.	Three-Month Period Ended March 31, 2016
Jan. to Dec.	Year Ended December 31, 2016
July 1 to June 30	Fiscal Year Ended June 30, 2016

Note the use of single and double rules in amount columns. A single line is used to show that the amounts above it are being added or subtracted. Double lines are used under the final amount in a column or section of a report to show that the amount is complete. Nothing is added to or subtracted from an amount with a double line.

Some companies refer to the income statement as the *statement of operations*. American Eagle Outfitters, Inc., reported \$3.16 billion in sales on consolidated statements of operations for the fiscal year ended January 2012.

The income statement for Wells' Consulting Services does not have dollar signs because it was prepared on accounting paper with ruled columns. However, dollar signs are used on income statements that are prepared on plain paper, that is, not on a ruled form.

## The Statement of Owner's Equity and the Balance Sheet

The **statement of owner's equity** reports the changes that occurred in the owner's financial interest during the reporting period. This statement is prepared before the balance sheet so that the amount of the ending capital balance is available for presentation on the balance sheet. Figure 2.4 on page 36 shows the statement of owner's equity for Wells' Consulting Services. Note that the statement of owner's equity has a three-line heading: *who*, *what*, and *when*.

- The first line of the statement of owner's equity is the capital balance at the beginning of the period.
- Net income is an increase to owner's equity; net loss is a decrease to owner's equity.
- Withdrawals by the owner are a decrease to owner's equity.

### >>2-5. OBJECTIVE

Prepare a statement of owner's equity and a balance sheet.

**FIGURE 2.4**

Statement of Owner's Equity for Wells' Consulting Services

Wells' Consulting Services					
Statement of Owner's Equity					
Month Ended December 31, 2016					
Carolyn Wells, Capital, December 1, 2016					1 0 0 0 0 0 0 0
Net Income for December	3 8 3 5 0 0 0				
Less Withdrawals for December	5 0 0 0 0 0 0				
Increase in Capital				3 3 3 5 0 0 0	
Carolyn Wells, Capital, December 31, 2016					1 3 3 3 5 0 0 0

- Additional investments by the owners are an increase to owner's equity.
- The total of changes in equity is reported on the line "Increase in Capital" (or "Decrease in Capital").
- The last line of the statement of owner's equity is the capital balance at the end of the period.

If Carolyn Wells had made any additional investments during December, this would appear as a separate line on Figure 2.4. Additional investments can be cash or other assets such as equipment. If an investment is made in a form other than cash, the investment is recorded at its fair market value. **Fair market value** is the current worth of an asset or the price the asset would bring if sold on the open market.

The ending balances in the asset and liability accounts are used to prepare the balance sheet.

	Assets					=	Liab.	+	Owner's Equity								
	Cash	+	Accts. Rec.	+	Supp.				+	Prepaid Rent	+	Equip.	=	Accts. Pay.	+	C. Wells, Capital	+
New balances	\$111,350	+	\$5,000	+	\$1,500	+	\$8,000	+	\$11,000	=	\$3,500	+	\$95,000	+	\$47,000	-	\$8,650
	\$136,850						\$136,850										

**important!**

**Financial Statements**

The balance sheet is a snapshot of the firm's financial position on a specific date. The income statement, like a movie or video, shows the results of business operations over a period of time.

The ending capital balance from the statement of owner's equity is also used to prepare the balance sheet. Figure 2.5 shows the balance sheet for Wells' Consulting Services on December 31, 2016.

The balance sheet shows:

- Assets—the types and amounts of property that the business owns,
- Liabilities—the amounts owed to creditors,
- Owner's Equity—the owner's equity on the reporting date.

In preparing a balance sheet, remember the following:

- The three-line heading gives the firm's name (who), the title of the report (what), and the date of the report (when).
- Balance sheets prepared using the account form (as in Figure 2.5) show total assets on the same horizontal line as the total liabilities and owner's equity.
- Dollar signs are omitted when financial statements are prepared on paper with ruled columns. Statements that are prepared on plain paper, not ruled forms, show dollar signs with the first amount in each column and with each total.
- A single line shows that the amounts above it are being added or subtracted. Double lines indicate that the amount is the final amount in a column or section of a report.

Figure 2.6 shows the connections among the financial statements. Financial statements are prepared in a specific order:

- income statement
- statement of owner's equity
- balance sheet

**FIGURE 2.5** Balance Sheet for Wells' Consulting Services

Wells' Consulting Services		Balance Sheet		December 31, 2016	
Assets			Liabilities		
Cash	1 1 1 3 5 0 0 0	Accounts Payable	3 5 0 0 0 0		
Accounts Receivable	5 0 0 0 0 0				
Supplies	1 5 0 0 0 0				
Prepaid Rent	8 0 0 0 0 0				
Equipment	1 1 0 0 0 0	<b>Owner's Equity</b>			
Total Assets	1 3 6 8 5 0 0 0	Carolyn Wells, Capital	1 3 3 3 5 0 0 0		
		Total Liabilities and Owner's Equity	1 3 6 8 5 0 0 0		

**Step 1:** Prepare the Income Statement

Wells' Consulting Services		Income Statement		Month Ended December 31, 2016	
Revenue					
Fees Income			4 7 0 0 0 0		
Expenses					
Salaries Expense	8 0 0 0 0 0				
Utilities Expense	6 5 0 0 0 0				
Total Expenses			8 6 5 0 0 0		
Net Income			3 8 3 5 0 0		

**FIGURE 2.6**

**Process for Preparing Financial Statements**

Net income (or loss) is transferred to the statement of owner's equity.

**Step 2:** Prepare the Statement of Owner's Equity

Wells' Consulting Services		Statement of Owner's Equity		Month Ended December 31, 2016	
Carolyn Wells, Capital, December 1, 2016			1 0 0 0 0 0 0 0		
Net Income for December	3 8 3 5 0 0				
Less Withdrawals for December	5 0 0 0 0 0				
Increase in Capital			3 3 3 5 0 0		
Carolyn Wells, Capital, December 31, 2016			1 3 3 3 5 0 0 0		

The ending capital balance is transferred to the balance sheet.

**Step 3:** Prepare the Balance Sheet

Wells' Consulting Services		Balance Sheet		December 31, 2016	
Assets			Liabilities		
Cash	1 1 1 3 5 0 0 0	Accounts Payable	3 5 0 0 0 0		
Accounts Receivable	5 0 0 0 0 0				
Supplies	1 5 0 0 0 0				
Prepaid Rent	8 0 0 0 0 0	<b>Owner's Equity</b>			
Equipment	1 1 0 0 0 0	Carolyn Wells, Capital	1 3 3 3 5 0 0 0		
Total Assets	1 3 6 8 5 0 0 0	Total Liabilities and Owner's Equity	1 3 6 8 5 0 0 0		

## MANAGERIAL IMPLICATIONS <<

### ACCOUNTING SYSTEMS

- Sound financial records and statements are necessary so that businesspeople can make good decisions.
- Financial statements show:
  - the amount of profit or loss,
  - the assets on hand,
  - the amount owed to creditors,
  - the amount of owner's equity.

- Well-run and efficiently managed businesses have good accounting systems that provide timely and useful information.
- Transactions involving revenue and expenses are recorded separately from owner's equity in order to analyze operations for the period.

#### THINKING CRITICALLY

If you were buying a business, what would you look for in the company's financial statements?

Net income from the income statement is used to prepare the statement of owner's equity. The ending capital balance from the statement of owner's equity is used to prepare the balance sheet.

## The Importance of Financial Statements

Preparing financial statements is one of the accountant's most important jobs. Each day millions of business decisions are made based on the information in financial statements.

Business managers and owners use the balance sheet and the income statement to control current operations and plan for the future. Creditors, prospective investors, governmental agencies, and others are interested in the profits of the business and in the asset and equity structure.

## Section 2 Self Review

### QUESTIONS

1. If an owner gives personal tools to the business, how is the transaction recorded?
2. What information is included in the financial statement headings?
3. What are withdrawals and how do they affect the basic accounting equation?

### EXERCISES

4. Design Interiors has assets of \$180,000 and liabilities of \$70,000. What is the owner's equity?
  - a. \$50,000
  - b. \$30,000

- c. \$160,000
- d. \$110,000
5. Haden Hardware had revenues of \$110,000 and expenses of \$52,000. How does this affect owner's equity?

### ANALYSIS

6. What information is contained in the income statement?
  - a. assets, liabilities, and owner's equity on a specific date
  - b. assets, liabilities, and owner's equity for a period of time

- c. revenue and expenses on a specific date
- d. revenues and expenses for a period of time

(Answers to Section 2 Self Review are on page 50.)

## REVIEW Chapter Summary

## Chapter 2

Accounting begins with the analysis of business transactions. Each transaction changes the financial position of a business. In this chapter, you have learned how to analyze business transactions and how they affect assets, liabilities, and owner's equity. After transactions are analyzed and recorded, financial statements reflect the summarized changes to and results of business operations.

### Learning Objectives

#### 2-1 Record in equation form the financial effects of a business transaction.

The equation *property equals financial interest* reflects the fact that in a free enterprise system all property is owned by someone. This equation remains in balance after each business transaction.

#### 2-2 Define, identify, and understand the relationship between asset, liability, and owner's equity accounts.

The term *assets* refers to property. The terms *liabilities* and *owner's equity* refer to financial interest. The relationship between assets, liabilities, and owner's equity is shown in equation form.

$$\text{Assets} = \text{Liabilities} + \text{Owner's Equity}$$

$$\text{Owner's Equity} = \text{Assets} - \text{Liabilities}$$

$$\text{Liabilities} = \text{Assets} - \text{Owner's Equity}$$

#### 2-3 Analyze the effects of business transactions on a firm's assets, liabilities, and owner's equity and record these effects in accounting equation form.

1. Describe the financial event.

- Identify the property.
- Identify who owns the property.
- Determine the amount of the increase or decrease.

2. Make sure the equation is in balance.

#### 2-4 Prepare an income statement.

The income statement summarizes changes in owner's equity that result from revenue and expenses. The difference between revenue and expenses is the net income or net loss of the business for the period.

An income statement has a three-line heading:

- who
- what
- when

For the income statement, "when" refers to a period of time.

#### 2-5 Prepare a statement of owner's equity and a balance sheet.

Changes in owner's equity for the period are summarized on the statement of owner's equity.

- Net income increases owner's equity.
- Added investments increase owner's equity.
- A net loss for the period decreases owner's equity.
- Withdrawals by the owner decrease owner's equity.

A statement of owner's equity has a three-line heading:

- who
- what
- when

For the statement of owner's equity, "when" refers to a period of time.

The balance sheet shows the assets, liabilities, and owner's equity on a given date.

A balance sheet has a three-line heading:

- who
- what
- when

For the balance sheet, "when" refers to a single date.

The financial statements are prepared in the following order.

1. Income Statement
2. Statement of Owner's Equity
3. Balance Sheet

#### 2-6 Define the accounting terms new to this chapter.

---

## Glossary

**Accounts payable** (p. 24) Amounts a business must pay in the future

**Accounts receivable** (p. 30) Claims for future collection from customers

**Assets** (p. 27) Property owned by a business

**Balance sheet** (p. 27) A formal report of a business's financial condition on a certain date; reports the assets, liabilities, and owner's equity of the business

**Break even** (p. 34) A point at which revenue equals expenses

**Business transaction** (p. 22) A financial event that changes the resources of a firm

**Capital** (p. 23) Financial investment in a business; equity

**Equity** (p. 23) An owner's financial interest in a business

**Expense** (p. 30) An outflow of cash, use of other assets, or incurring of a liability

**Fair market value** (p. 36) The current worth of an asset or the price the asset would bring if sold on the open market

**Fundamental accounting equation** (p. 29) The relationship between assets and liabilities plus owner's equity

**Income statement** (p. 34) A formal report of business operations covering a specific period of time; also called a profit and loss statement or a statement of income and expenses

**Liabilities** (p. 27) Debts or obligations of a business

**Net income** (p. 34) The result of an excess of revenue over expenses

**Net loss** (p. 34) The result of an excess of expenses over revenue

**On account** (p. 24) An arrangement to allow payment at a later date; also called a charge account or open-account credit

**Owner's equity** (p. 27) The financial interest of the owner of a business; also called proprietorship or net worth

**Revenue** (p. 30) An inflow of money or other assets that results from the sales of goods or services or from the use of money or property; also called income

**Statement of owner's equity** (p. 35) A formal report of changes that occurred in the owner's financial interest during a reporting period

**Withdrawals** (p. 33) Funds taken from the business by the owner for personal use

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## Comprehensive Self Review

1. In what order are the financial statements prepared? Why?
2. What effect do revenue and expenses have on owner's equity?
3. What is the difference between buying for cash and buying on account?
4. If one side of the fundamental accounting equation is decreased, what will happen to the other side? Why?
5. Describe a transaction that will cause Accounts Payable and Cash to decrease by \$1,200.

(Answers to Comprehensive Self Review are on page 51.)

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## Discussion Questions

1. What is the fundamental accounting equation?
2. What are assets, liabilities, and owner's equity?
3. What information does the balance sheet contain?

4. What information does the income statement contain?
5. What information does the statement of owner's equity contain?
6. What information is shown in the heading of a financial statement?
7. Why does the third line of the headings differ on the balance sheet and the income statement?
8. What is revenue?
9. What are expenses?
10. How is net income determined?
11. How does net income affect owner's equity?
12. Describe the effects of each of the following business transactions on assets, liabilities, and owner's equity.
  - a. Bought equipment on credit.
  - b. Paid salaries to employees.
  - c. Sold services for cash.
  - d. Paid cash to a creditor.
  - e. Bought furniture for cash.
  - f. Sold services on credit.

## APPLICATIONS

### Exercises ACCOUNTING

#### Determining accounting equation amounts.

Just before Walker Laboratories opened for business, James Walker, the owner, had the following assets and liabilities. Determine the totals that would appear in the firm's fundamental accounting equation (Assets = Liabilities + Owner's Equity).

Cash	\$41,500
Laboratory Equipment	76,600
Laboratory Supplies	7,800
Loan Payable	16,100
Accounts Payable	10,125

#### ◀ Exercise 2.1 Objectives 2-1, 2-2

#### Completing the accounting equation.

The fundamental accounting equation for several businesses follows. Supply the missing amounts.

Assets	=	Liabilities	+	Owner's Equity
1. \$27,800	=	\$5,560	+	\$ ?
2. \$24,200	=	\$5,180	+	\$ ?
3. \$16,075	=	\$ ?	+	\$10,400
4. \$ ?	=	\$4,400	+	\$32,325
5. \$34,000	=	\$ ?	+	\$25,125

#### ◀ Exercise 2.2 Objectives 2-1, 2-2

**Exercise 2.3**  
Objectives 2-1,  
2-2, 2-3

► **Determining the effects of transactions on the accounting equation.**

Indicate the impact of each of the transactions below on the fundamental accounting equation (Assets = Liabilities + Owner's Equity) by placing a "+" to indicate an increase and a "-" to indicate a decrease. The first transaction is entered as an example.

	Assets	=	Liabilities	+	Owner's Equity
<b>Transaction 1</b>	<u>+</u>		<u>          </u>		<u>+</u>

**TRANSACTIONS**

- Owner invested \$90,000 in the business.
- Purchased \$26,700 supplies on account.
- Purchased equipment for \$21,000 cash.
- Paid \$6,000 for rent (in advance).
- Performed services for \$7,800 cash.
- Paid \$2,160 for utilities.
- Performed services for \$10,500 on account.
- Received \$6,600 from charge account customers.
- Paid salaries of \$4,500 to employees.
- Paid \$6,000 to a creditor on account.

**Exercise 2.4**  
Objectives 2-1,  
2-2, 2-3

► **Determining balance sheet amounts.**

The following financial data are for the dental practice of Dr. David Malone when he began operations in July. Determine the amounts that would appear in Dr. Malone's balance sheet.

- Owes \$19,000 to the Davis Equipment Company.
- Has cash balance of \$13,500.
- Has dental supplies of \$3,650.
- Owes \$4,180 to 21st Century Furniture Supply.
- Has dental equipment of \$26,550.
- Has office furniture of \$8,000.

**Exercise 2.5**  
Objectives 2-1,  
2-2, 2-3

► **Determining the effects of transactions on the accounting equation.**

EZ Copy had the transactions listed below during the month of June. Show how each transaction would be recorded in the accounting equation. Compute the totals at the end of the month. The headings to be used in the equation follow.

Assets			=	Liabilities	+	Owner's Equity						
Cash	+	Accounts Receivable	+	Equipment	=	Accounts Payable	+	John Amos, Capital	+	Revenue	-	Expenses

**TRANSACTIONS**

- John Amos started the business with a cash investment of \$60,000.
- Purchased equipment for \$22,000 on credit.
- Performed services for \$3,100 in cash.

4. Purchased additional equipment for \$4,600 in cash.
5. Performed services for \$5,050 on credit.
6. Paid salaries of \$4,450 to employees.
7. Received \$3,200 cash from charge account customers.
8. Paid \$13,000 to a creditor on account.

### Computing net income or net loss.

Computer Maintenance and Repair Shop had the following revenue and expenses during the month ended July 31. Did the firm earn a net income or incur a net loss for the period? What was the amount?

Fees for computer repairs	\$44,600
Advertising expense	6,300
Salaries expense	19,100
Telephone expense	1,150
Fees for printer repairs	6,550
Utilities expense	1,600

### Exercise 2.6 Objective 2-4

### Identifying transactions.

The following equation shows the effects of a number of transactions that took place at Beck Auto Repair Company during the month of July. Describe each transaction.

### Exercise 2.7 Objectives 2-1, 2-2, 2-3

	Assets			=	Liabilities	+	Owner's Equity						
	Cash	Accounts Receivable	Equipment				Accounts Payable	Peter Beck, Capital	Revenue	Expenses			
Bal.	\$80,000	+	\$6,000	+	\$64,000	=	\$38,000	+	\$112,000	+	0	-	0
1.	+10,000										+10,000		
2.	-7,600		+7,600										
3.	-3,800				-3,800								
4.	-6,700												+6,700
5.	+1,500	-	1,500										
6.		+12,000									+12,000		
7.	-4,100												+4,100

### Preparing an income statement.

At the beginning of September, Alexandria Perez started Perez Investment Services, a firm that offers advice about investing and managing money. On September 30, the accounting records of the business showed the following information. Prepare an income statement for the month of September 2016.

Cash	\$33,100	Fees Income	\$77,900
Accounts Receivable	4,000	Advertising Expense	6,500
Office Supplies	3,400	Salaries Expense	16,000
Office Equipment	37,500	Telephone Expense	800
Accounts Payable	5,700	Withdrawals	9,000
Alexandria Perez, Capital, September 1, 2016	26,700		

### Exercise 2.8 Objective 2-4

### Computing net income or net loss.

On December 1, Kate Holmes opened a speech and hearing clinic. During December, her firm had the following transactions involving revenue and expenses. Did the firm earn a net income or incur a net loss for the period? What was the amount?

### Exercise 2.9 Objective 2-4

Paid \$3,100 for advertising.  
 Provided services for \$2,800 in cash.  
 Paid \$800 for telephone service.  
 Paid salaries of \$2,600 to employees.  
 Provided services for \$3,000 on credit.  
 Paid \$450 for office cleaning service.

**Exercise 2.10** ▶ **Preparing a statement of owner's equity and a balance sheet.**

**Objective 2-5**

**CONTINUING >>>**  
**Problem**

Using the information provided in Exercise 2.8, prepare a statement of owner's equity for the month of September and a balance sheet for Perez Investment Services as of September 30, 2016.

## PROBLEMS

### Problem Set A



**Problem 2.1A** ▶ **Analyzing the effects of transactions on the accounting equation.**

**Objectives 2-1,  
2-2, 2-3**

On July 1, Guy Fernandez established Fernandez Home Appraisal Services, a firm that provides expert residential appraisals and represents clients in home appraisal hearings.

#### INSTRUCTIONS

Analyze the following transactions. Record in equation form the changes that occur in assets, liabilities, and owner's equity. (Use plus, minus, and equals signs.)

#### TRANSACTIONS

- The owner invested \$97,000 in cash to begin the business.
- Paid \$19,750 in cash for the purchase of equipment.
- Purchased additional equipment for \$14,400 on credit.
- Paid \$11,800 in cash to creditors.
- The owner made an additional investment of \$30,000 in cash.
- Performed services for \$8,200 in cash.
- Performed services for \$6,300 on account.
- Paid \$4,000 for rent expense.
- Received \$3,500 in cash from credit clients.
- Paid \$6,460 in cash for office supplies.
- The owner withdrew \$9,000 in cash for personal expenses.

**Analyze:** What is the ending balance of cash after all transactions have been recorded?

**Problem 2.2A** ▶ **Analyzing the effects of transactions on the accounting equation.**

**Objectives 2-1,  
2-2, 2-3**

Maurice Dickey is a painting contractor who specializes in painting commercial buildings. At the beginning of June, his firm's financial records showed the following assets, liabilities, and owner's equity.

Cash	\$61,000	Accounts Payable	\$11,200
Accounts Receivable	16,600	Maurice Dickey, Capital	91,500
Office Furniture	35,800	Revenue	58,600
Auto	23,500	Expenses	24,400

#### INSTRUCTIONS

Set up an accounting equation using the balances given above. Record the effects of the following transactions in the equation. (Use plus, minus, and equals signs.) Record new balances after each transaction has been entered. Prove the equality of the two sides of the final equation on a separate sheet of paper.

**TRANSACTIONS**

1. Performed services for \$6,680 on credit.
2. Paid \$1,700 in cash for new office chairs.
3. Received \$11,200 in cash from credit clients.
4. Paid \$880 in cash for telephone service.
5. Sent a check for \$4,500 in partial payment of the amount due creditors.
6. Paid salaries of \$9,700 in cash.
7. Sent a check for \$1,120 to pay electric bill.
8. Performed services for \$10,500 in cash.
9. Paid \$2,350 in cash for auto repairs.
10. Performed services for \$12,500 on account.

**Analyze:** What is the amount of total assets after all transactions have been recorded?

**Preparing a balance sheet.**

Brown Equipment Repair Service is owned by James Brown.

◀ **Problem 2.3A**  
Objective 2-5

**INSTRUCTIONS**

Use the following figures to prepare a balance sheet dated February 29, 2016. (You will need to compute the owner's equity.)

Cash	\$34,300	Equipment	\$78,000
Supplies	6,380	Accounts Payable	24,000
Accounts Receivable	13,200		

**Analyze:** What is the net worth, or owner's equity, at February 29, 2016 for Brown Equipment Repair Service?

**Preparing an income statement, a statement of owner's equity, and a balance sheet.**

◀ **Problem 2.4A**  
Objectives 2-4, 2-5

The following equation shows the transactions of Cotton Cleaning Service during May. The business is owned by Taylor Cotton.

	Assets				=	Liab. +		Owner's Equity							
	Cash	+	Accts. Rec.	+		Supp.	+	Equip.	=	Accts. Pay.	+	T. Cotton, Capital	+	Rev.	-
Balances, May 1	15,000	+	3,000	+	5,800	+	33,800	=	7,000	+	50,600	+	0	-	0
Paid for utilities	<u>-980</u>							=							+980
New balances	14,020	+	3,000	+	5,800	+	33,800	=	7,000	+	50,600	+	0	-	980
Sold services for cash	<u>+4,980</u>							=					+4,980		
New balances	19,000	+	3,000	+	5,800	+	33,800	=	7,000	+	50,600	+	4,980	-	980
Paid a creditor	<u>-2,100</u>							=	<u>-2,100</u>						
New balances	16,900	+	3,000	+	5,800	+	33,800	=	4,900	+	50,600	+	4,980	-	980
Sold services on credit			<u>+2,900</u>					=					+2,900		
New balances	16,900	+	5,900	+	5,800	+	33,800	=	4,900	+	50,600	+	7,880	-	980
Paid salaries	<u>-8,900</u>							=							+8,900
New balances	8,000	+	5,900	+	5,800	+	33,800	=	4,900	+	50,600	+	7,880	-	9,880
Paid telephone bill	<u>-314</u>							=							+314
New balances	7,686	+	5,900	+	5,800	+	33,800	=	4,900	+	50,600	+	7,880	-	10,194
Withdrew cash for personal expenses	<u>-3,000</u>							=							
New balances	4,686	+	5,900	+	5,800	+	33,800	=	4,900	+	47,600	+	7,880	-	10,194

**INSTRUCTIONS**

Analyze each transaction carefully. Prepare an income statement and a statement of owner's equity for the month. Prepare a balance sheet for May 31, 2016. List the expenses in detail on the income statement.

**Analyze:** In order to complete the balance sheet, which amount was transferred from the statement of owner's equity?

**Problem Set B****Problem 2.1B**  
**Objectives 2-1,**  
**2-2, 2-3****▶ Analyzing the effects of transactions on the accounting equation.**

On September 1, Rosa Escobedo opened Self Confidence Tutoring Service.

**INSTRUCTIONS**

Analyze the following transactions. Use the fundamental accounting equation form to record the changes in property, claims of creditors, and owner's equity. (Use plus, minus, and equals signs.)

**TRANSACTIONS**

1. The owner invested \$72,000 in cash to begin the business.
2. Purchased equipment for \$32,000 in cash.
3. Purchased \$12,000 of additional equipment on credit.
4. Paid \$6,000 in cash to creditors.
5. The owner made an additional investment of \$12,000 in cash.
6. Performed services for \$8,400 in cash.
7. Performed services for \$7,300 on account.
8. Paid \$5,200 for rent expense.
9. Received \$5,000 in cash from credit clients.
10. Paid \$6,300 in cash for office supplies.
11. The owner withdrew \$10,000 in cash for personal expenses.

**Analyze:** Which transactions increased the company's debt? By what amount?

**Problem 2.2B**  
**Objectives 2-1,**  
**2-2, 2-3****▶ Analyzing the effects of transactions on the accounting equation.**

Sherrye Cravens owns Cravens's Consulting Service. At the beginning of September, her firm's financial records showed the following assets, liabilities, and owner's equity.

Cash	\$38,000	Accounts Payable	\$10,000
Accounts Receivable	12,000	Sherrye Cravens, Capital	49,800
Supplies	12,800	Revenue	52,000
Office Furniture	24,000	Expenses	25,000

**INSTRUCTIONS**

Set up an equation using the balances given above. Record the effects of the following transactions in the equation. (Use plus, minus, and equals signs.) Record new balances after each transaction has been entered. Prove the equality of the two sides of the final equation on a separate sheet of paper.

**TRANSACTIONS**

1. Performed services for \$8,000 on credit.
2. Paid \$2,880 in cash for utilities.
3. Performed services for \$10,000 in cash.
4. Paid \$1,600 in cash for office cleaning service.
5. Sent a check for \$4,800 to a creditor.
6. Paid \$1,920 in cash for the telephone bill.

7. Issued checks for \$14,000 to pay salaries.
8. Performed services for \$11,200 in cash.
9. Purchased additional supplies for \$2,000 on credit.
10. Received \$6,000 in cash from credit clients.

**Analyze:** What is the ending balance for owner's equity after all transactions have been recorded?

### Preparing a balance sheet.

Douglas Smith is opening a tax preparation service on December 1, which will be called Smith's Tax Service. Douglas plans to open the business by depositing \$50,000 cash into a business checking account. The following assets will also be owned by the business: furniture (fair market value of \$10,000) and computers and printers (fair market value of \$12,000). There are no outstanding debts of the business as it is formed.

#### INSTRUCTIONS

Prepare a balance sheet for December 1, 2016, for Smith's Tax Service by entering the correct balances in the appropriate accounts. (You will need to use the accounting equation to compute owner's equity.)

**Analyze:** If Smith's Tax Service had an outstanding debt of \$16,000 when the business was formed, what amount should be reported on the balance sheet for owner's equity?

◀ **Problem 2.3B**  
Objective 2-5

### Preparing an income statement, a statement of owner's equity, and a balance sheet.

The equation below shows the transactions of Kathryn Proctor, Attorney and Counselor of Law, during August. This law firm is owned by Kathryn Proctor.

◀ **Problem 2.4B**  
Objectives 2-4, 2-5

	Assets				=	Liab.	+	Owner's Equity							
	Cash	+	Accts. Rec.	+				Supp.	+	Equip.	=	Accts. Pay.	+	K. Proctor, Capital	+
Balances, Aug. 1	7,200		1,800	+	5,400	+	10,000	=	1,200	+	23,200	+	0	-	0
Paid for utilities	-600							=							+600
New balances	6,600	+	1,800	+	5,400	+	10,000	=	1,200	+	23,200	+	0	-	600
Performed services for cash	+6,000							=					+6,000		
New balances	12,600	+	1,800	+	5,400	+	10,000	=	1,200	+	23,200	+	6,000	-	600
Paid a creditor	-600							=	-600						
New balances	12,000	+	1,800	+	5,400	+	10,000	=	600	+	23,200	+	6,000	-	600
Performed services on credit			+4,800					=					+4,800		
New balances	12,000	+	6,600	+	5,400	+	10,000	=	600	+	23,200	+	10,800	-	600
Paid salaries	-5,400							=							+5,400
New balances	6,600	+	6,600	+	5,400	+	10,000	=	600	+	23,200	+	10,800	-	6,000
Paid telephone bill	-600							=							+600
New balances	6,000	+	6,600	+	5,400	+	10,000	=	600	+	23,200	+	10,800	-	6,600
Withdrew cash for personal expenses	-1,200							=			-1,200				
New balances	4,800	+	6,600	+	5,400	+	10,000	=	600	+	22,000	+	10,800	-	6,600

**INSTRUCTIONS**

Analyze each transaction carefully. Prepare an income statement and a statement of owner's equity for the month. Prepare a balance sheet for August 31, 2016. List the expenses in detail on the income statement.

**Analyze:** In order to complete the statement of owner's equity, which amount was transferred from the income statement?

**Critical Thinking Problem 2.1****Financial Statements**

The following account balances are for Carl Nicholson, Certified Public Accountant, as of April 30, 2016.

Cash	\$30,000
Accounts Receivable	12,000
Maintenance Expense	4,600
Advertising Expense	3,890
Fees Earned	26,800
Carl Nicholson, Capital, April 1	?
Salaries Expense	13,000
Machinery	21,000
Accounts Payable	13,200
Carl Nicholson, Drawing	6,800

**INSTRUCTIONS**

Using the accounting equation form, determine the balance for Carl Nicholson, Capital, April 1, 2016. Prepare an income statement for the month of April, a statement of owner's equity, and a balance sheet as of April 30, 2016. List the expenses on the income statement in alphabetical order.

**Analyze:** What net change in owner's equity occurred during the month of April?

**Critical Thinking Problem 2.2****Accounting for a New Company**

James Mitchell opened a gym and fitness studio called Body Builders Fitness Center at the beginning of November of the current year. It is now the end of December, and James is trying to determine whether he made a profit during his first two months of operations. You offer to help him and ask to see his accounting records. He shows you a shoe box and tells you that every piece of paper pertaining to the business is in that box.

As you go through the material in the shoe box, you discover the following:

- A receipt from Clayton Properties for \$8,000 for November's rent on the exercise studio.
- Bank deposit slips totaling \$7,360 for money collected from customers who attended exercise classes.
- An invoice for \$50,000 for exercise equipment. The first payment is not due until December 31.
- A bill for \$2,100 from the maintenance service that cleans the studio. James has not yet paid this bill.
- A December 19 parking ticket for \$200. James says he was in a hurry that morning to get to the Fitness Center on time and forgot to put money in the parking meter.
- A handwritten list of customers and fees for the classes they have taken. As the customers attend the classes, James writes their names and the amount of each customer's fee on the list. As customers pay, James crosses their names off the list. Fees not crossed off the list amount to \$2,400.
- A credit card receipt for \$800 for printing flyers advertising the grand opening of the studio. For convenience, James used his personal credit card.
- A credit card receipt for \$800 for four warm-up suits James bought to wear at the studio. He also put this purchase on his personal credit card.

Use the concepts you have learned in this chapter to help James.

1. Prepare an income statement for the first two months of operation of Body Builders Fitness Center.
2. How would you evaluate the results of the first two months of operation?
3. What advice would you give James concerning his system of accounting?

## BUSINESS CONNECTIONS

### Interpreting Results

1. After examining financial data for a monthly period, the owner of a small business expressed surprise that the firm's cash balance had decreased during the month even though there was substantial net income. Do you think this owner is right to expect cash to increase because of a substantial net income? Why or why not?
2. Is it reasonable to expect that all new businesses will have a net income from the first month's operations? From the first year's operations?
3. Why should managers be concerned with changes in the amount of creditors' claims against the business?
4. How does an accounting system help managers control operations and make sound decisions?

Managerial FOCUS

### To Record or Not to Record

You are Julia, a new Accounts Receivable Clerk for Nixon Paper and Office Supply. Toward the end of the month, Carol Reed, a very personable sales associate, tells you that the previous A/R clerk always recorded a Sales Invoice when she got a verbal agreement from a customer to buy paper or office supplies. She has a verbal order from her favorite customer for \$10,000 of paper and wants you to create a Sales Invoice today. You know that in order to create a Sales Invoice you need a purchase order from the customer. You also know that Ms. Reed receives a monthly bonus based on the monthly sales. If her sales are above \$20,000, she gets a 10 percent bonus. Would you agree to record the sales of products before receiving the purchase order from the customer? What effect would it have on the customer, on the Sales Associate, on the company, and on the job?

Ethical DILEMMA

### Income Statement

Review the following excerpt from the 2012 consolidated statement of income for Southwest Airlines Co. Answer the questions that follow.

<b>Southwest Airlines Co.</b>			
Consolidated Statement of Income			
Years Ended December 31, 2010, 2011, and 2012			
	2012	2011	2010
<i>Operating Revenues (in millions):</i>			
<i>Passenger</i>	\$16,093	\$14,735	\$11,489
<i>Freight</i>	160	139	125
<i>Other</i>	835	784	490
<i>Total operating revenues</i>	17,088	15,658	12,104
<i>Net Income</i>	\$421	\$178	\$459



Financial Statement ANALYSIS

#### Analyze:

1. Although the format for the heading of an income statement can vary from company to company, the heading should contain the answers to who, what, and when. List the answers to each question for the statement presented above.

2. What three types of revenue are reflected on this statement?
3. The net income of \$421,000,000 reflected on Southwest Airlines Co.'s consolidated statement of income for 2012 will be transferred to the next financial statement to be prepared. Net income is needed to complete which statement?

**Analyze Online:** Find the *Investor Relations* section of the Southwest Airlines Co. website ([www.southwest.com](http://www.southwest.com)) and answer the following questions.

4. What total operating revenues did Southwest Airlines Co. report for the most recent quarter?
5. Find the most recent press release posted on the website. Read the press release, and summarize the topic discussed. What effect, if any, do you think this will have on company earnings? Why?

#### Internet CONNECTION

### Selling on Internet

Go to the Federated Corporation website at [www.federated-fds.com](http://www.federated-fds.com). What companies are included in this corporation? Can you see a link to purchase items on line? What transaction, if any, would you record when an item is ordered from the Internet? Does the website include job offerings? What jobs would be available in Finance (go to Support operations, finance to find the requirements for a job)?

#### TEAMWORK

### Working to Provide Accurate Data

Gloria's Fabrics is a large fabric provider to the general public. The accounting office has three employees: accounts receivable clerk, accounts payable clerk, and full charge bookkeeper. The accounts receivable clerk creates the sales invoices and records the cash receipts, the accounts payable clerk creates and pays the purchase orders, and the full charge bookkeeper reconciles the checking account. Assign each group member one of the three jobs. Identify the accounts and describe the transactions that would be recorded by that assigned job. What effect would each transaction have on each account? How would each member of the accounting department work together to present accurate information for the decision makers?

## Answers to Self Reviews

### Answers to Section 1 Self Review

1. An example is the initial investment of cash in a business by the owner.
2. Amounts that a company must pay to creditors in the future.
3. A financial event that changes the resources of the firm.
4. d. \$150,000
5. a. Equipment is increased by \$2,950 and accounts payable is increased by \$2,950.
6. \$20,000

### Answers to Section 2 Self Review

1. As an additional investment by the owner recorded on the basis of fair market value.
2. The firm's name (who), the title of the statement (what), and the time period covered by the report (when).
3. Funds taken from the business to pay for personal expenses. They decrease the owner's equity in the business.
4. d. \$110,000
5. \$58,000 increase
6. d. revenue and expenses for a period of time

**Answers to Comprehensive Self Review**

1. The income statement is prepared first because the net income or loss is needed to complete the statement of owner's equity. The statement of owner's equity is prepared next to update the change in owner's equity. The balance sheet is prepared last.
2. Revenue increases owner's equity. Expenses decrease owner's equity.
3. Buying for cash results in an immediate decrease in cash; buying on account results in a liability recorded as accounts payable.
4. The opposite side of the accounting equation will decrease because a decrease in assets results in a corresponding decrease in either a liability or the owner's equity.
5. The payment of \$1,200 to a creditor on account.

