Chapter 3 The Double-Entry Framework

LEARNING OBJECTIVES

Careful study of this chapter should enable you to:

- **LO1** Define the parts of a T account.
- **LO2** Foot and balance a T account.
- **LO3** Describe the effects of debits and credits on specific types of accounts.
- **LO4** Use T accounts to analyze transactions.
- **LO5** Prepare a trial balance and explain its purposes and linkages with the financial statements.

Tired of receiving spam e-mail messages? Or, are you worried about your computer picking up a virus, or being hacked? Businesses have the same concerns. In response to demand for email and web security, AppRiver was founded in April of 2002 to provide simple, yet powerful protection from Internet-based threats to businesses of any size. The company is based in Gulf Breeze Florida, and maintains multiple data centers at secure locations in the United States, Europe, and Asia. AppRiver's 200 employees protect more than 60,000 companies around the world by providing spam and virus protection, email encryption, and web security.

Just as internet security is important to you in your personal life and to businesses, the same can be said about accounting. A solid understanding of financial accounting will help you manage your personal finances and help you understand business transactions in your professional life. In this chapter, you will learn about the double-entry framework used by businesses to enter transactions into an accounting system. You could use the same concepts for your personal transactions or for a business you might start.

The terms asset, liability, owner's equity, revenue, and expense were explained in Chapter 2. Examples showed how individual business transactions change one or more of these basic accounting elements. Each transaction had a dual effect. An increase or decrease in any asset, liability, owner's equity, revenue, or expense was *always* accompanied by an offsetting change within the basic accounting elements. The fact that each transaction has a dual effect upon the accounting elements provides the basis for what is called double-entry accounting. To understand double-entry accounting, it is important to learn how T accounts work and the role of debits and credits in accounting.

LO1 The T Account

Define the parts of a T account.

The assets of a business may consist of a number of items, such as cash, accounts receivable, equipment, buildings, and land. The liabilities may consist of one or more items, such as accounts payable and notes payable. Similarly, owner's equity may consist of the owner's investments and various revenue and expense items. A separate account is used to record the increases and decreases in each type of asset, liability, owner's equity, revenue, and expense.

The T account gets its name from the fact that it resembles the letter T. The three major parts of an account are as follows:

LEARNING KEY

Debit means left and credit means right.

1. the title,
2. the debit, or left side, and
3. the credit, or right side.

Title	
Debit = Left	Credit = Right

The debit side is always on the left, and the credit side is always on the right. This is true for all types of asset, liability, owner's equity, revenue, and expense accounts.

Sometimes new accounting students think that a debit is bad because it sounds like "debt." Similarly, credit sounds like a good thing, especially when the bank says they will credit your account. Please clear your mind of these thoughts. ***In accounting, debit simply means left and credit means right.***

LO2 Balancing a T Account

Foot and balance a T account.

To determine the balance of a T account at any time, simply total the dollar amounts on the debit and credit sides. These totals are known as footings. The difference between the footings is called the balance of the account. This amount is then written on the side with the larger footing.

In Chapter 2, the accounting equation was used to analyze business transactions. This required columns in which to record the increases and decreases in various accounts. Let's compare this approach with the use of a T account for the transactions affecting cash. When a T account is used, increases in cash are recorded on the debit side and decreases are recorded on the credit side. Transactions for Mitchell's Campus Delivery are shown in Figure 3-1.

FIGURE 3-1 Cash T Account

COLUMNAR SUMMARY (From Chapter 2, page 31)		T ACCOUNT FORM					
Transaction	**Cash**			**Cash**			
(a)	5,000		(a)	5,000	(b)	2,000	
(b)	(2,000)		(e)	2,100	(d)	600	
(d)	(600)		(j)	1,900	(f)	1,000	
(e)	2,100		(n)	900	(g)	100	
(f)	(1,000)	footing →		**9,900**	(i)	80	
(g)	(100)				(k)	300	
(i)	(80)				(l)	700	
(j)	1,900				(m)	1,650	
(k)	(300)				(o)	3,000	
(l)	(700)	Balance →		470		**9,430**	← footing
(m)	(1,650)						
(n)	900						
(o)	(3,000)						
Balance	470						

CHECKPOINT

Complete Checkpoint-1 on page 74 to test your basic understanding of LO2.

LO3 Debits and Credits

Describe the effects of debits and credits on specific types of accounts.

To **debit** an account means to enter an amount on the left or debit side of the account. To **credit** an account means to enter an amount on the right or credit side of the account. *Debits may increase or decrease the balances of specific accounts. This is also true for credits. To learn how to use debits and credits, it is best to focus on the accounting equation.*

Abbreviations: Often debit and credit are abbreviated as: Dr. = Debit, Cr. = Credit (based on the Latin terms "debere" and "credere")

Assets		=	Liabilities		+	Owner's Equity	
Debit	Credit		Debit	Credit		Debit	Credit
+	−		−	+		−	+

Asset accounts are on the left side of the equal sign—they increase on the left side (debits).

Liability and owner's equity accounts are on the right side of the equal sign—they increase on the right side (credits).

Assets

Assets are on the left side of the accounting equation. Therefore, increases are entered on the left (debit) side of an asset account, and decreases are entered on the right (credit) side.

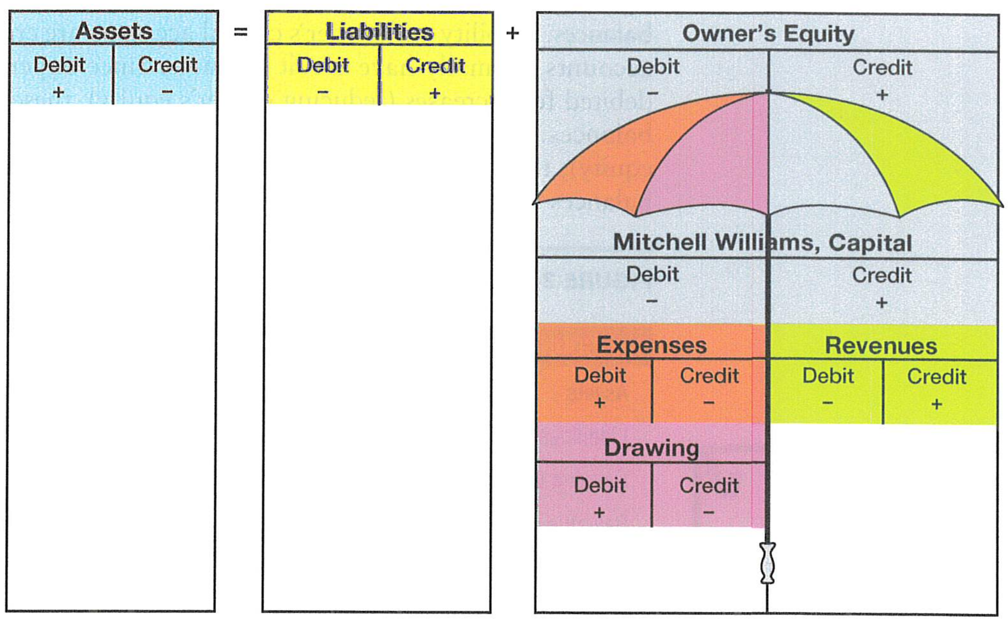
Liabilities and Owner's Equity

Liabilities and owner's equity are on the right side of the equation. Therefore, increases are entered on the right (credit) side, and decreases are entered on the left (debit) side.

The Owner's Equity Umbrella

Owner's equity includes four types of accounts: Owner's Capital, Revenues, Expenses, and Drawing. Expanding the accounting equation helps illustrate the use of debits and credits. Since these accounts affect owner's equity, they are shown under the "umbrella" of owner's equity in the accounting equation in Figure 3-2. It is helpful to think of the Owner's Capital account as hovering over the revenue, expense, and drawing accounts like an umbrella. Since revenues increase Owner's Capital, the revenue account is shown under the credit side of Owner's Capital. Since expenses and drawing reduce Owner's Capital, they are shown under the debit side of Owner's Capital.

FIGURE 3-2 The Accounting Equation and the Owner's Equity Umbrella



> **LEARNING KEY**
> You could credit the owner's capital account for revenues and debit the capital account for expenses and withdrawals. However, this is not a good idea. Using specific accounts provides additional information about why owner's equity increased or decreased.

Owner's Capital

The owner's capital account, Mitchell Williams, Capital, in Figure 3-2 reports the amount the owner has invested in the business. These investments increase the owner's equity and are credited to the owner's capital account.

Revenues

Revenues increase owner's equity. Revenues could be recorded directly on the credit side of the owner's capital account. However, readers of financial statements are interested in the specific types of revenues earned. Therefore, specific revenue accounts, like Delivery Fees, Sales, and Service Fees, are used. These specific accounts are credited when revenue is earned.

Remember: An increase in an expense decreases owner's equity.

Expenses

Expenses decrease owner's equity. Expenses could be recorded on the debit side of the owner's capital account. However, readers of financial statements want to see the types of expenses incurred during the accounting period. Thus, specific expense accounts are maintained for items like rent, wages, advertising, and utilities. These specific accounts are debited as expenses are incurred.

Drawing

Withdrawals of cash and other assets by the owner for personal reasons decrease owner's equity. Withdrawals could be debited directly to the owner's capital account. However, readers of financial statements want to know the amount of withdrawals for the accounting period. Thus, as shown in Figure 3-2, withdrawals are debited to a separate account, Drawing.

Normal Balances

A **normal balance** is the side of an account that is used to increase the account. Thus, the normal balances for the accounts illustrated in Figure 3-2 are shown with a "+" sign. Since assets are debited for increases, these accounts normally have **debit balances**. Liability and owner's capital accounts are credited for increases; thus, these accounts normally have **credit balances**. Since expense and drawing accounts are debited for increases (reducing owner's equity), these accounts normally have debit balances. Finally, revenue accounts are credited for increases (increasing owner's equity); thus, these accounts normally have credit balances. A summary of normal balances is provided in Figure 3-3.

CHECKPOINT

Complete Checkpoint-2 on page 74 to test your basic understanding of LO3.

FIGURE 3-3 Normal Balances

ACCOUNT	INCREASE	DECREASE	NORMAL BALANCE
Assets	Debit	Credit	Debit
Liabilities	Credit	Debit	Credit
Owner's Capital	Credit	Debit	Credit
Revenues	Credit	Debit	Credit
Expenses	Debit	Credit	Debit
Drawing	Debit	Credit	Debit

LO4 Transaction Analysis

Use T accounts to analyze transactions.

LEARNING KEY

Since the accounting equation must stay in balance, there must be at least one debit and at least one credit for each transaction.

In Chapter 2, you learned how to analyze transactions by using the accounting equation. Here, we continue to use the accounting equation, but add debits and credits by using T accounts. As shown in Figure 3-4, the three basic questions that must be answered when analyzing a transaction are essentially the same but are expanded slightly to address the use of the owner's equity umbrella and T accounts. You must determine the location of the account within the accounting equation and/or the owner's equity umbrella. You must also determine whether the accounts should be debited or credited.

FIGURE 3-4 Steps in Transaction Analysis

1. **What happened?**
   Be sure you understand the event that has taken place.
2. **Which accounts are affected?**
   Once you understand what happened, you must:
   - Identify the accounts that are affected.
   - Classify these accounts as assets, liabilities, owner's equity, revenues, or expenses.
   - Identify the location of the accounts in the accounting equation and/or the owner's equity umbrella—left or right.
3. **How is the accounting equation affected?**
   - Determine whether the accounts have increased or decreased.
   - Determine whether the accounts should be debited or credited.
   - Make certain the accounting equation remains in balance after the transaction has been entered.
     (1) Assets = Liabilities + Owner's Equity
     (2) Debits = Credits for every transaction

Debits and Credits: Asset, Liability, and Owner's Equity Accounts

Transactions (a) through (d) from Mitchell's Campus Delivery (Chapter 2) demonstrate the double-entry process for transactions affecting asset, liability, and owner's equity accounts.

As you study each transaction, answer the three questions: (1) What happened? (2) Which accounts are affected? and (3) How is the accounting equation affected? The transaction statement tells you what happened. The analysis tells which accounts are affected. The illustration shows you how the accounting equation is affected.

Transaction (a): Investment by owner

Mitchell Williams, opened a bank account with a deposit of $5,000 for his business (Figure 3-5).

Analysis. As a result of this transaction, the business acquired an asset, Cash. In exchange for the asset, the business gave Mitchell Williams, owner's equity. The owner's equity account is called Mitchell Williams, Capital. The transaction is entered as an increase in an asset and an increase in owner's equity. Debit Cash and credit Mitchell Williams, Capital for $5,000.

FIGURE 3-5 Transaction (a): Investment by Owner

Assets		=	Liabilities		+	Owner's Equity	
Debit +	Credit −		Debit −	Credit +		Debit −	Credit +
Cash						Mitchell Williams, Capital	
(a) 5,000							(a) 5,000
$5,000		=	$0		+	$5,000	
$5,000		=	$5,000				

Transaction (b): Purchase of an asset for cash

Mitch bought a motor scooter (delivery equipment) for $2,000 cash (Figure 3-6).

Analysis. Mitch exchanged one asset, Cash, for another, Delivery Equipment. Debit Delivery Equipment and credit Cash for $2,000. Notice that the total assets are still $5,000 as they were following transaction (a). Transaction (b) shifted assets from cash to delivery equipment, but total assets remained the same.

FIGURE 3-6 Transaction (b): Purchase of an Asset for Cash

Assets		=	Liabilities		+	Owner's Equity	
Debit +	Credit −		Debit −	Credit +		Debit −	Credit +
Cash						**Mitchell Williams, Capital**	
Bal. 5,000							Bal. 5,000
	(b) 2,000						
Bal. 3,000							
Delivery Equipment							
(b) 2,000							
$5,000		=	$0		+	$5,000	
$5,000		=	**$5,000**				

Transaction (c): Purchase of an asset on account

Mitch bought a second motor scooter on account for $1,800 (Figure 3-7). Recall from Chapter 2 that "on account" means Mitch will pay for the asset later.

Analysis. The asset, Delivery Equipment, increases by $1,800 and the liability, Accounts Payable, increases by the same amount. Thus, debit Delivery Equipment and credit Accounts Payable for $1,800.

FIGURE 3-7 Transaction (c): Purchase of an Asset on Account

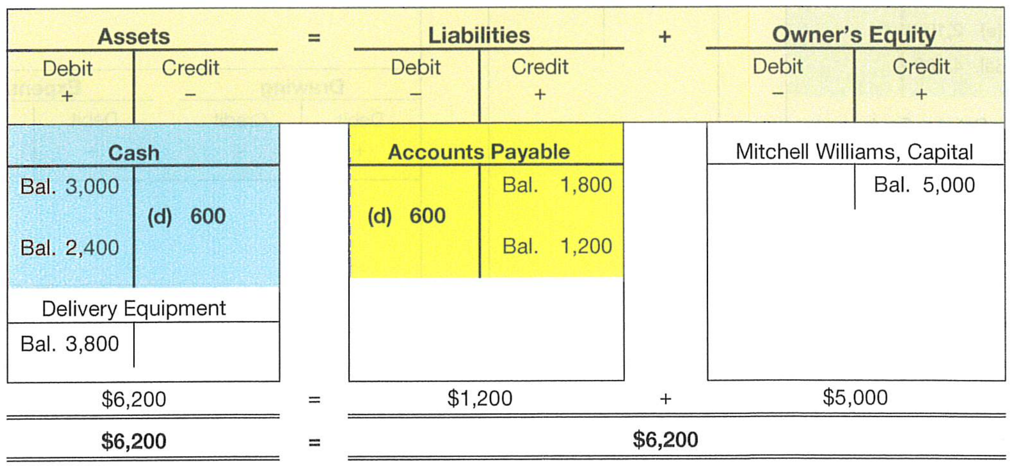
Assets		=	Liabilities		+	Owner's Equity	
Debit +	Credit −		Debit −	Credit +		Debit −	Credit +
Cash			**Accounts Payable**			**Mitchell Williams, Capital**	
Bal. 3,000				(c) 1,800			Bal. 5,000
Delivery Equipment							
Bal. 2,000							
(c) 1,800							
Bal. 3,800							
$6,800		=	$1,800		+	$5,000	
$6,800		=	**$6,800**				

Transaction (d): Payment on account

Mitch made the first $600 payment on the scooter purchased in transaction (c) (Figure 3-8).

Analysis. This payment decreases the asset, Cash, and decreases the liability, Accounts Payable. Debit Accounts Payable and credit Cash for $600.

FIGURE 3-8 Transaction (d): Payment on Account



LEARNING KEY

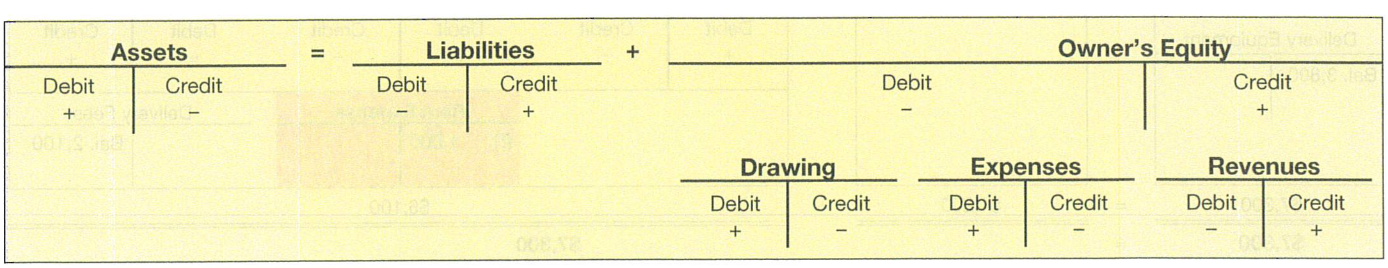
Credits increase the capital account. Revenues increase capital. Thus, revenues are shown under the credit side of owner's equity and the capital account. Debits decrease the capital account. Expenses and drawing reduce the capital account. Thus, they are shown under the debit side of owner's equity and the capital account.

Notice that for transactions (a) through (d), the debits equal credits and the accounting equation is in balance. Review transactions (a) through (d). Again, identify the accounts that were affected and how they were classified (assets, liabilities, or owner's equity). Finally, note each account's location within the accounting equation.

Debits and Credits: Including Revenues, Expenses, and Drawing

Transactions (a) through (d) involved only assets, liabilities, and the owner's capital account. To complete the illustration of Mitchell's Campus Delivery, the equation is expanded to include revenues, expenses, and drawing. Remember, revenues increase owner's equity and are shown under the credit side of the capital account. Expenses and drawing decrease owner's equity and are shown under the debit side of the capital account. The expanded equation is shown in Figure 3-9.

FIGURE 3-9 The Expanded Accounting Equation

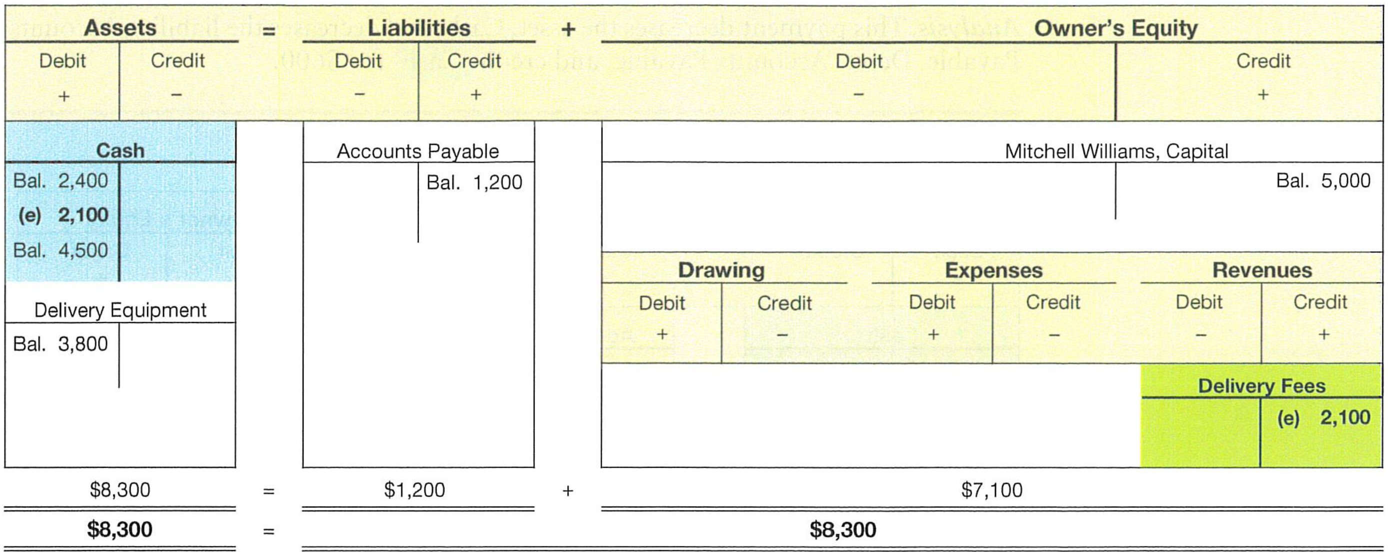


Transaction (e): Delivery revenues earned in cash

Mitch made deliveries and received $2,100 cash from clients (Figure 3-10).

Analysis. The asset, Cash, and the revenue, Delivery Fees, increase. Debit Cash and credit Delivery Fees for $2,100.

FIGURE 3-10 Transaction (e): Delivery Revenues Earned in Cash



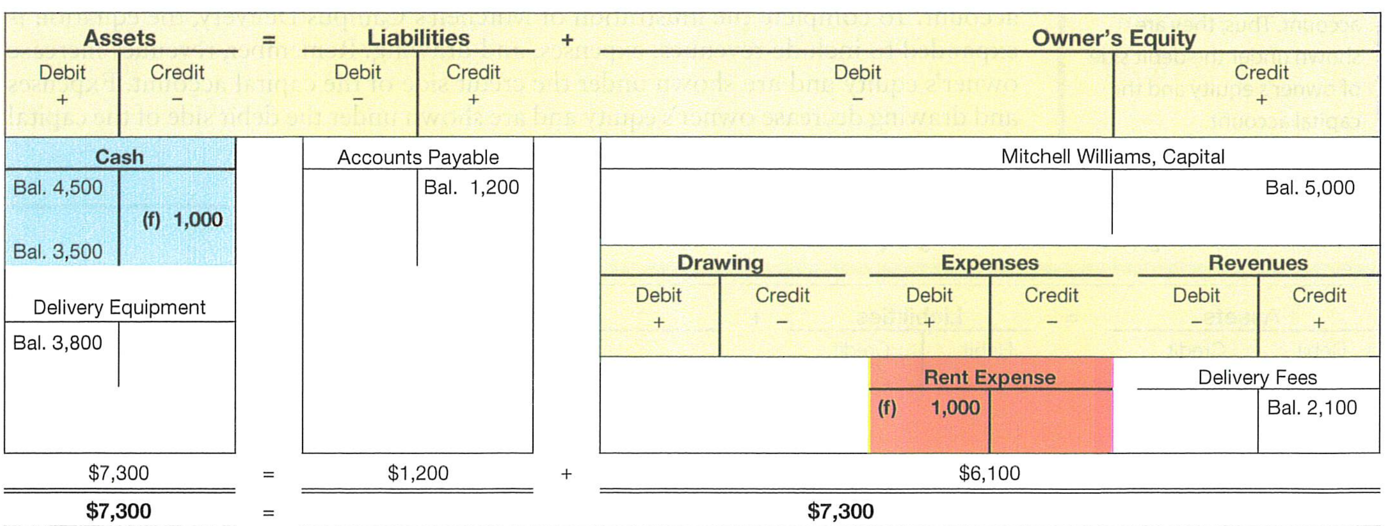
Transaction (f): Paid rent for month

Mitch paid $1,000 for office rent for June (Figure 3-11).

Analysis. Rent Expense increases and Cash decreases. Debit Rent Expense and credit Cash for $1,000.

A debit to an expense account *increases* that expense and *decreases* owner's equity. Notice that the placement of the plus and minus signs for expenses is opposite the placement of the signs for owner's equity. Note also that expenses are located on the left (debit) side of the owner's equity umbrella.

FIGURE 3-11 Transaction (f): Paid Rent for Month

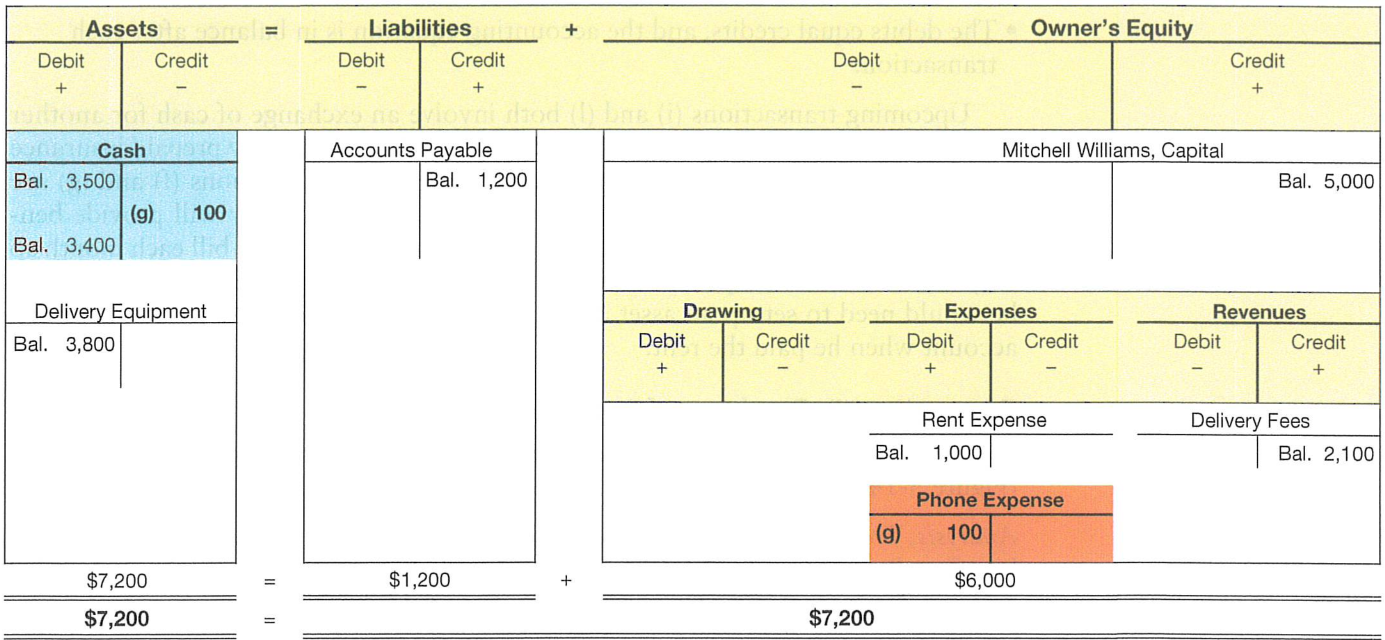


Transaction (g): Paid phone bill

Mitch paid for phone service, $100 (Figure 3-12).

Analysis. This transaction, like the previous one, increases an expense and decreases an asset. Debit Phone Expense and credit Cash for $100.

FIGURE 3-12 Transaction (g): Paid Phone Bill

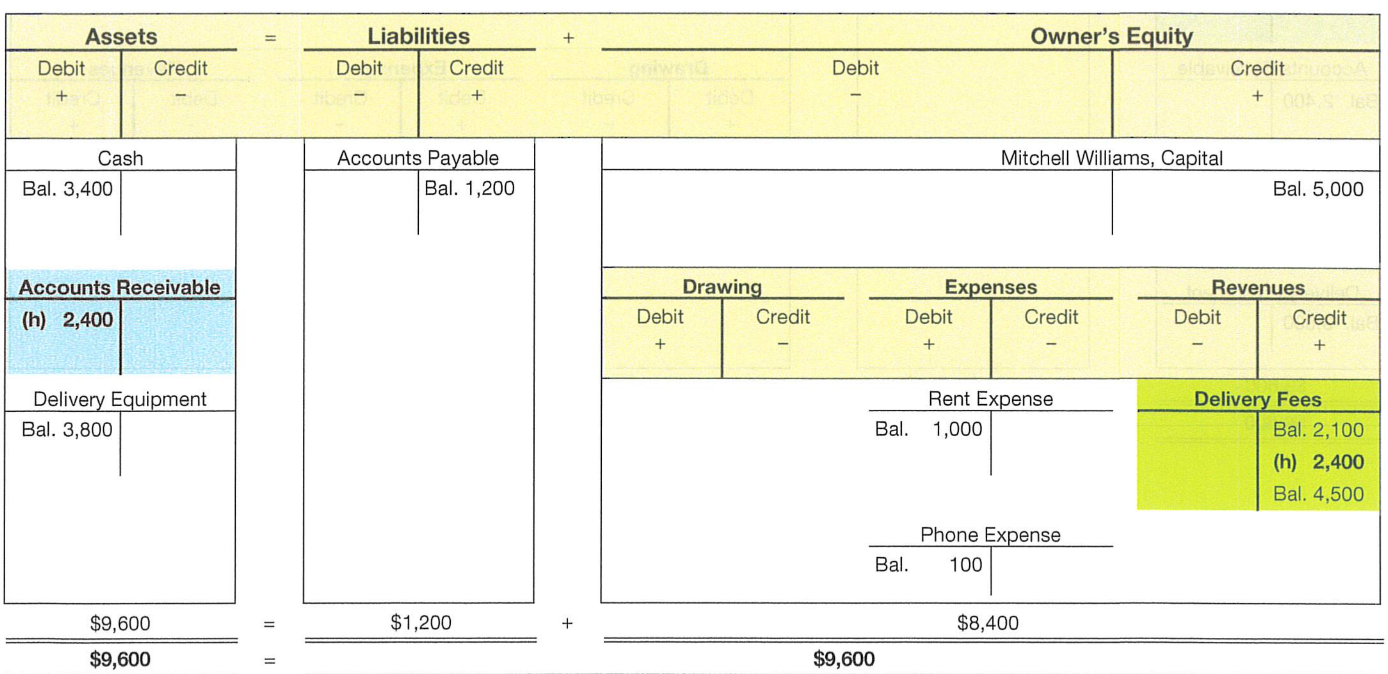


Transaction (h): Delivery revenues earned on account

Mitch made deliveries on account for $2,400 (Figure 3-13).

Analysis. As discussed in Chapter 2, delivery services are performed for which payment will be received later. This is called offering services "on account" or "on credit." Instead of receiving cash, Mitch receives a promise that his customers will pay cash in the future. Therefore, the asset, Accounts Receivable, increases. Since revenues are recognized when earned, the revenue account, Delivery Fees, also increases. Debit Accounts Receivable and credit Delivery Fees for $2,400.

FIGURE 3-13 Transaction (h): Delivery Revenues Earned on Account



Review transactions (e) through (h). Note the following:

- Expense and revenue transactions do not always affect cash.
- The debits equal credits, and the accounting equation is in balance after each transaction.

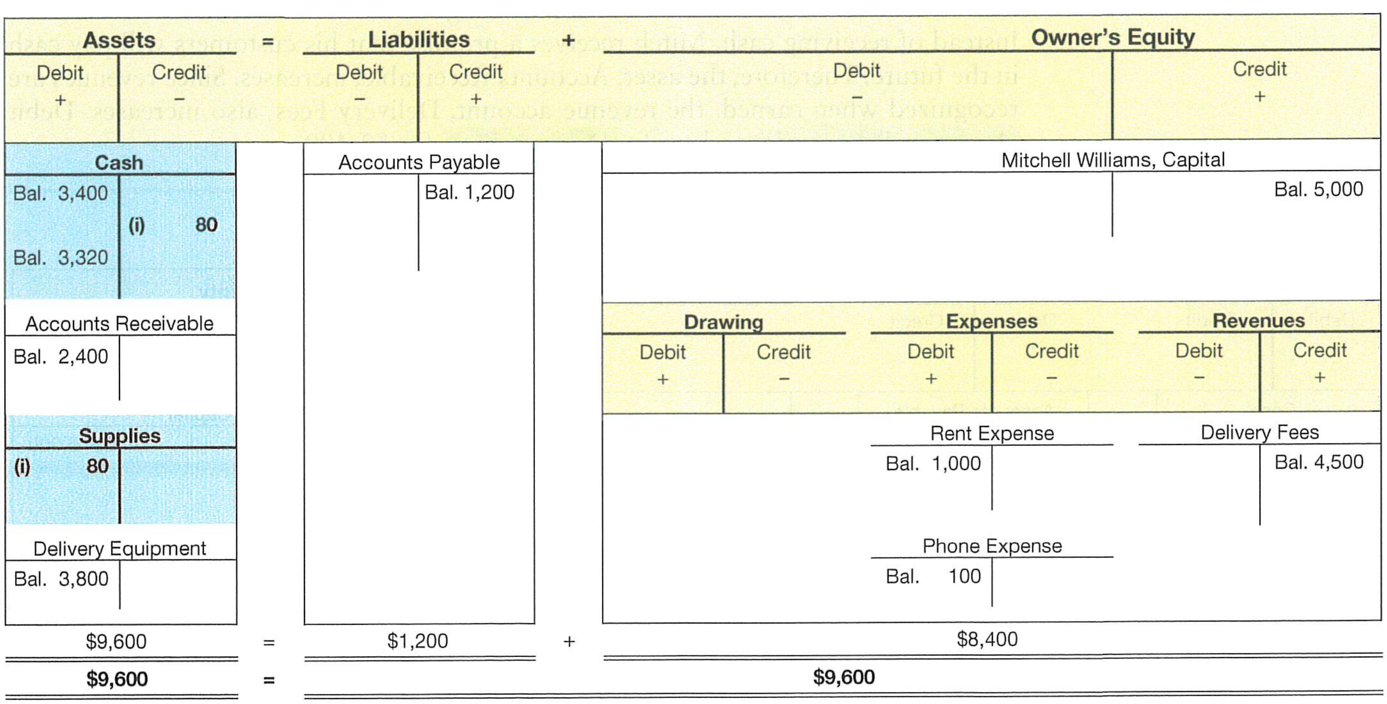
Upcoming transactions (i) and (l) both involve an exchange of cash for another asset. As you analyze these two transactions, you may wonder why prepaid insurance and supplies are assets while the rent and phone bill in transactions (f) and (g) are expenses. Prepaid insurance and supplies are assets because they will provide benefits for more than one month. Mitch pays his rent and his phone bill each month so they are classified as expenses. If Mitch paid his rent only once every three months, he would need to set up an asset account called Prepaid Rent. He would debit this account when he paid the rent.

Transaction (i): Purchase of Supplies

Mitch bought pens, paper, delivery envelopes, and other supplies for $80 cash (Figure 3-14).

Analysis. These supplies will last for several months. Since they will generate future benefits, the supplies should be recorded as an asset. An asset, Supplies, increases, and an asset, Cash, decreases. Debit Supplies and credit Cash for $80.

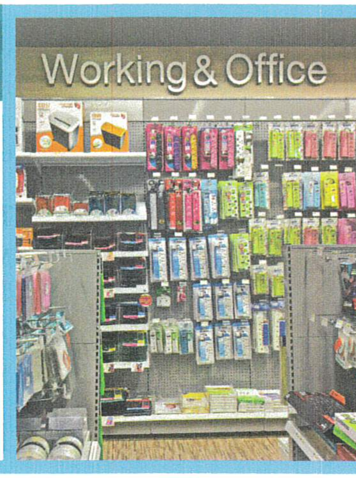
FIGURE 3-14 Transaction (i): Purchase of Supplies



A BROADER VIEW

Supplies—Asset or Expense?

When businesses buy office supplies from Staples or other suppliers, the supplies are initially recorded as assets. This is done because the supplies will provide future benefits. Those still remaining in inventory at the end of the accounting period are reported on the balance sheet as assets. Supplies actually used during the period are recognized as an expense on the income statement. We will discuss how to account for the expense in Chapter 5.



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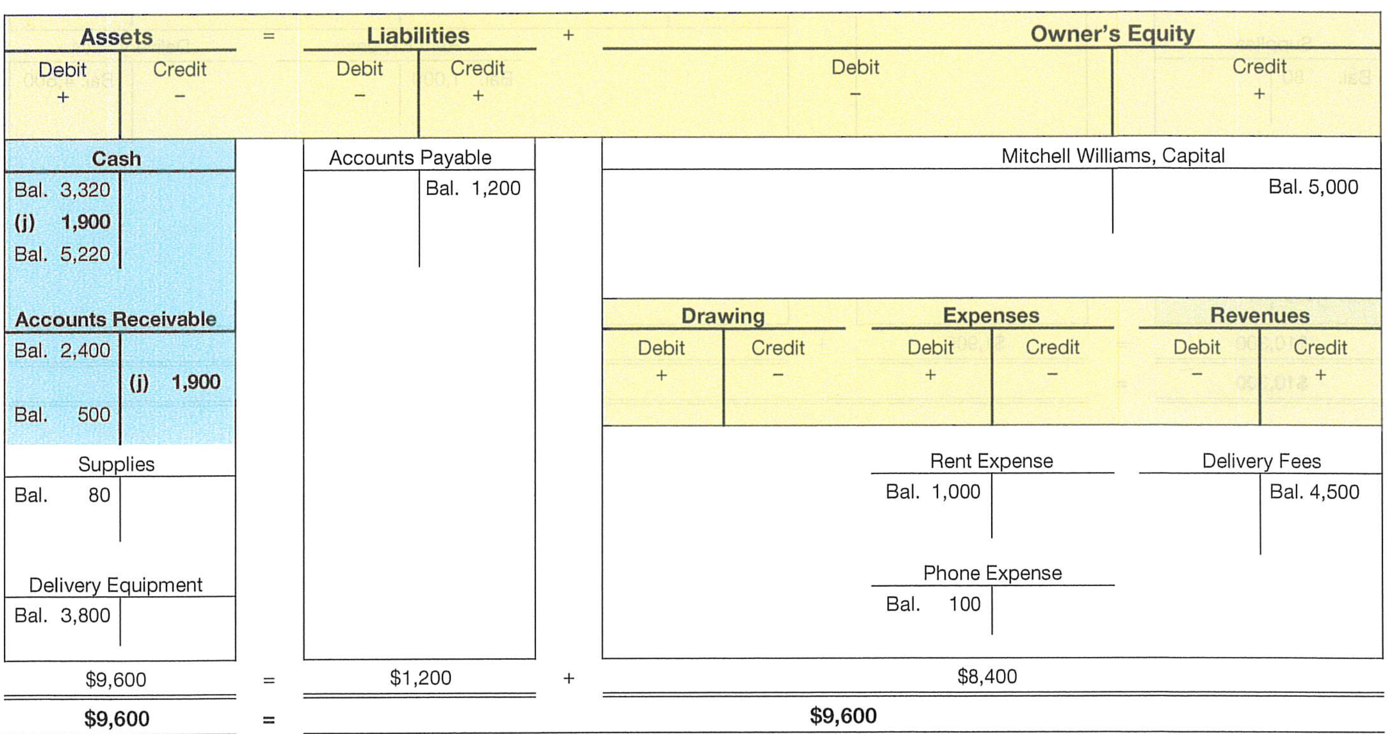
Transaction (j): Cash receipts from prior sales on account

Mitch received $1,900 in cash for delivery services performed for customers earlier in the month [see transaction (h)] (Figure 3-15).

Analysis. This transaction increases Cash and reduces the amount due from customers reported in Accounts Receivable. Debit Cash and credit Accounts Receivable $1,900.

As you analyze transaction (j), notice which accounts are affected and the location of these accounts in the accounting equation. Mitch received cash, but this transaction did not affect revenue. The revenue was recorded in transaction (h). Transaction (j) is an exchange of one asset (Accounts Receivable) for another asset (Cash).

FIGURE 3-15 Transaction (j): Cash Receipts from Prior Sales on Account



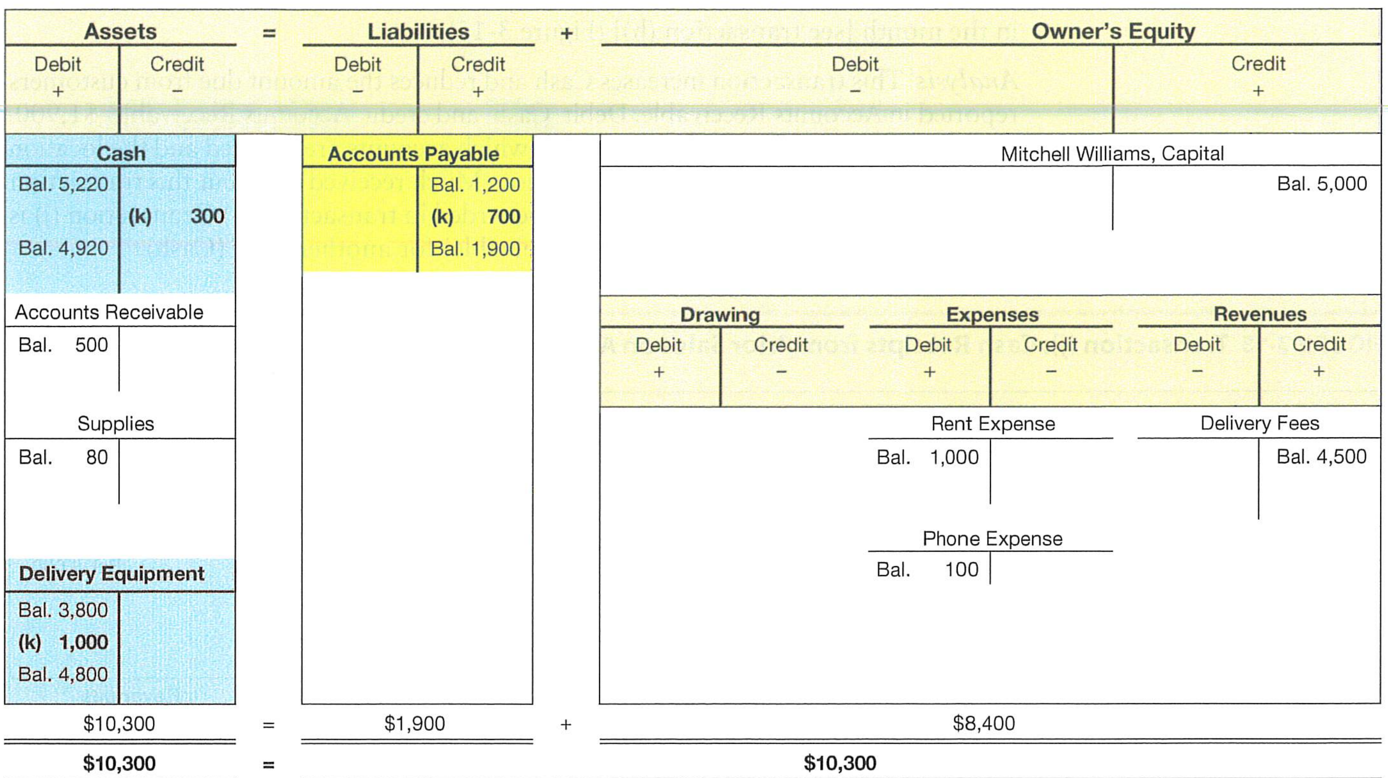
As you analyze transactions (k) through (o), make certain that you understand what has happened in each transaction. Identify the accounts that are affected and the locations of these accounts within the accounting equation. Notice that the accounting equation remains in balance after every transaction and debits equal credits for each transaction.

Transaction (k): Purchase of an asset on credit making a partial payment

Mitch bought a third motor scooter for $1,000. Mitch made a down payment of $300 and spread the remaining payments over the next four months (Figure 3-16).

Analysis. The asset, Delivery Equipment, increases by $1,000, Cash decreases by $300, and the liability, Accounts Payable, increases by $700. Thus, debit Delivery Equipment for $1,000, credit Cash for $300, and credit Accounts Payable for $700. This transaction requires one debit and two credits. Even so, total debits ($1,000) equal the total credits ($700 + $300) and the accounting equation remains in balance.

FIGURE 3-16 Transaction (k): Purchase of an Asset on Credit Making a Partial Payment



Transaction (l): Payment of insurance premium

Mitch paid $700 for an eight-month liability insurance policy (Figure 3-17).

Analysis. Since insurance is paid in advance and will provide future benefits, it is treated as an asset. Therefore, one asset, Prepaid Insurance, increases and another, Cash, decreases. Debit Prepaid Insurance and credit Cash for $700.

Transaction (m): Payment of wages

Mitch paid his part-time employees $1,650 in wages (Figure 3-18).

Analysis. This is an additional business expense. Wages Expense increases and Cash decreases. Debit Wages Expense and credit Cash for $1,650.

FIGURE 3-17 Transaction (l): Payment of Insurance Premium

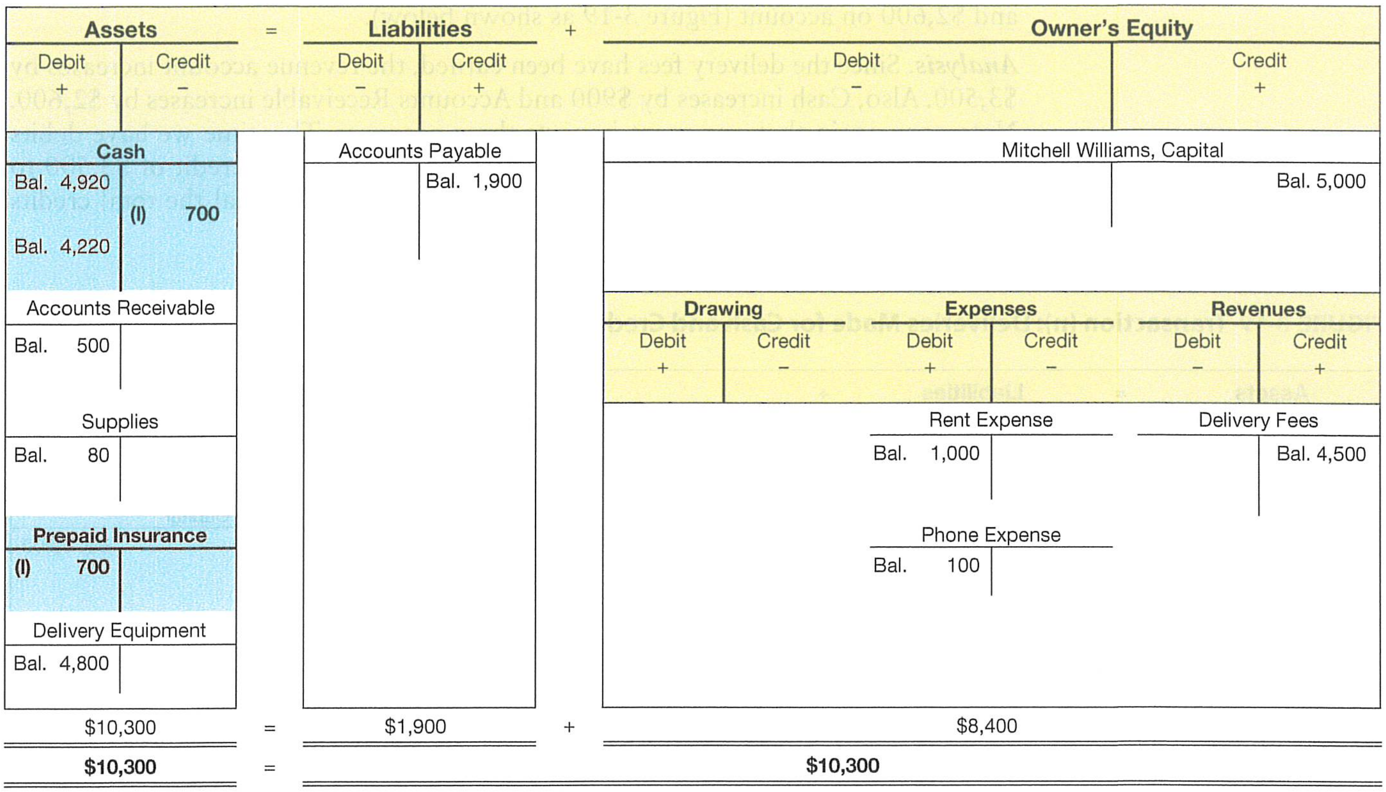
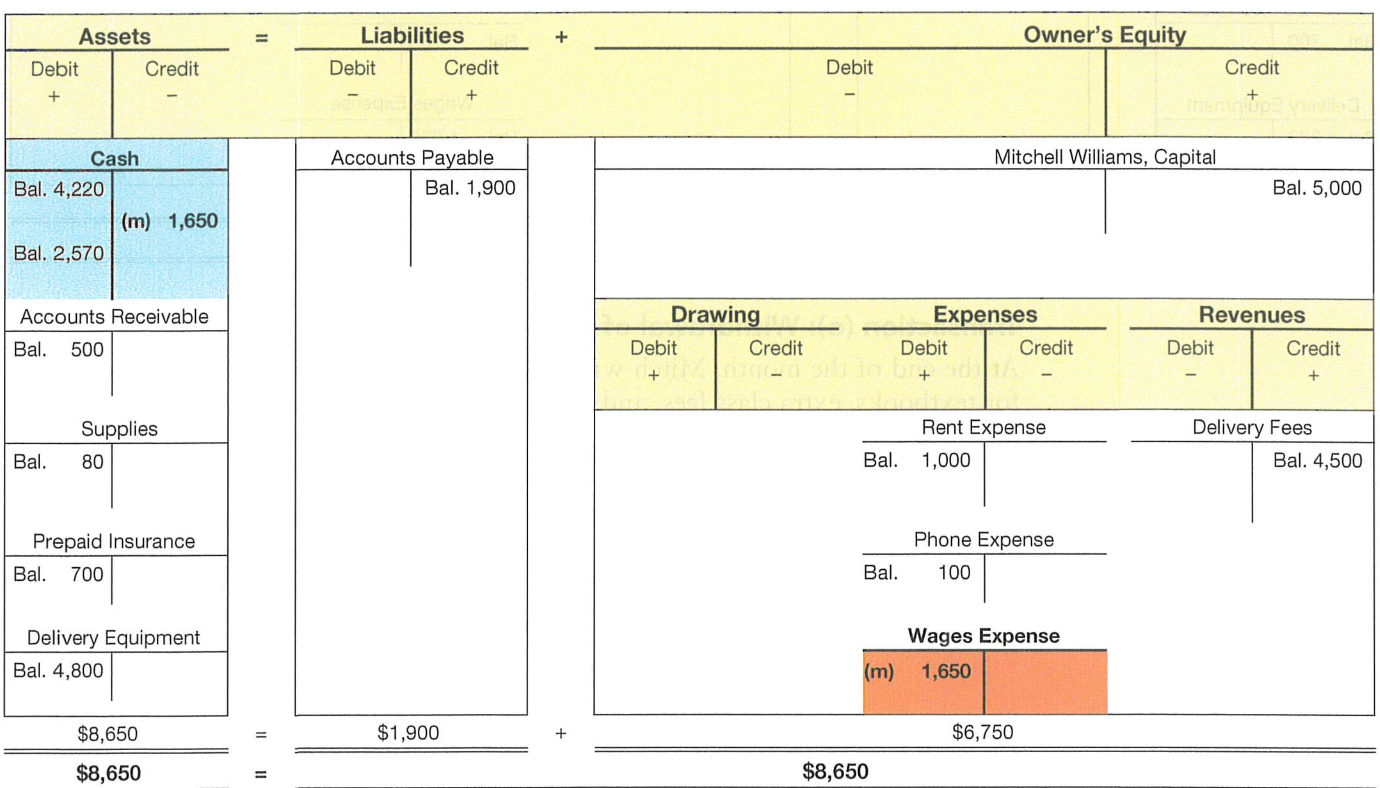


FIGURE 3-18 Transaction (m): Payment of Wages

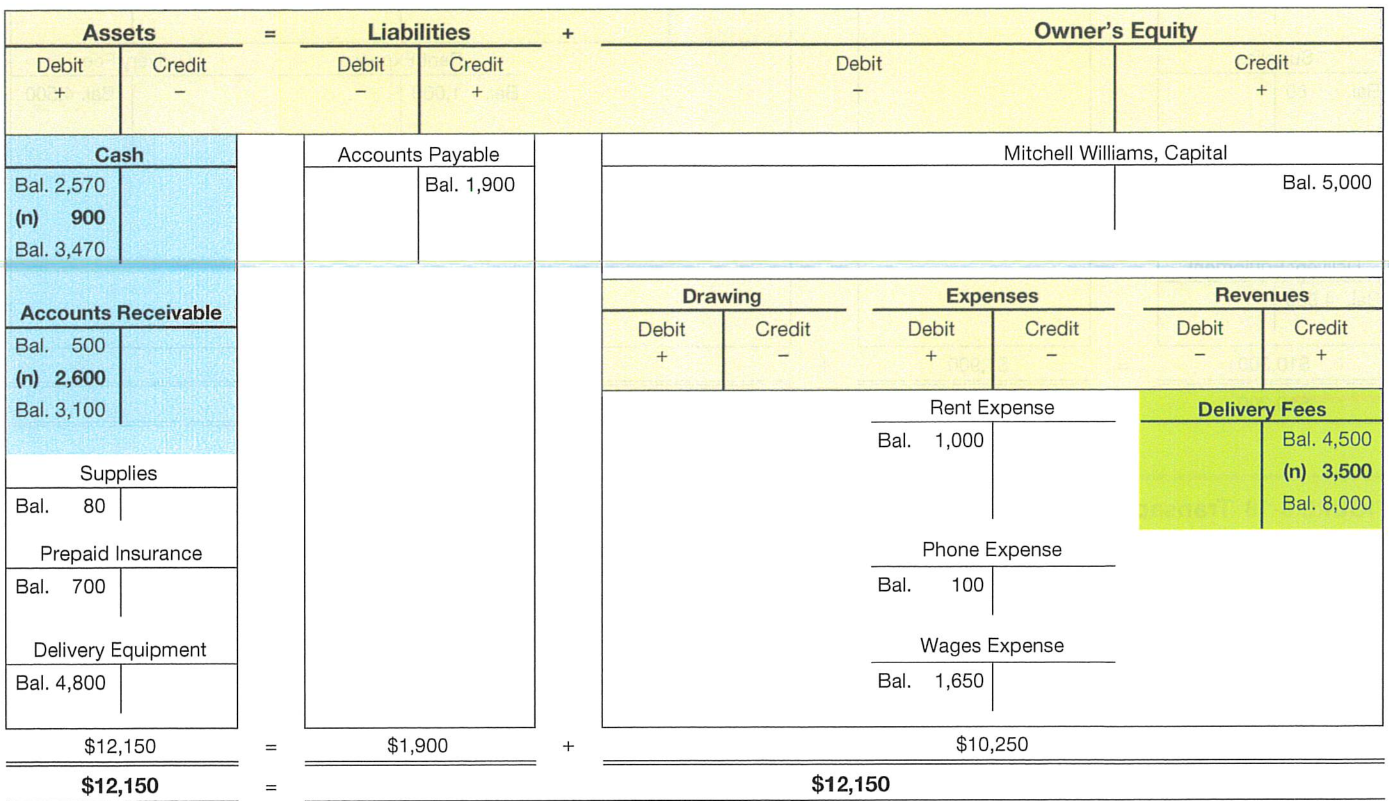


Transaction (n): Deliveries made for cash and credit

Total delivery fees for the remainder of the month amounted to $3,500: $900 in cash and $2,600 on account (Figure 3-19 as shown below).

Analysis. Since the delivery fees have been earned, the revenue account increases by $3,500. Also, Cash increases by $900 and Accounts Receivable increases by $2,600. Note once again that one event impacts three accounts. This time we have debits of $900 to Cash and $2,600 to Accounts Receivable and a credit of $3,500 to Delivery Fees. As before, the total debits ($900 + $2,600) equal the total credits ($3,500) and the accounting equation remains in balance.

FIGURE 3-19 Transaction (n): Deliveries Made for Cash and Credit



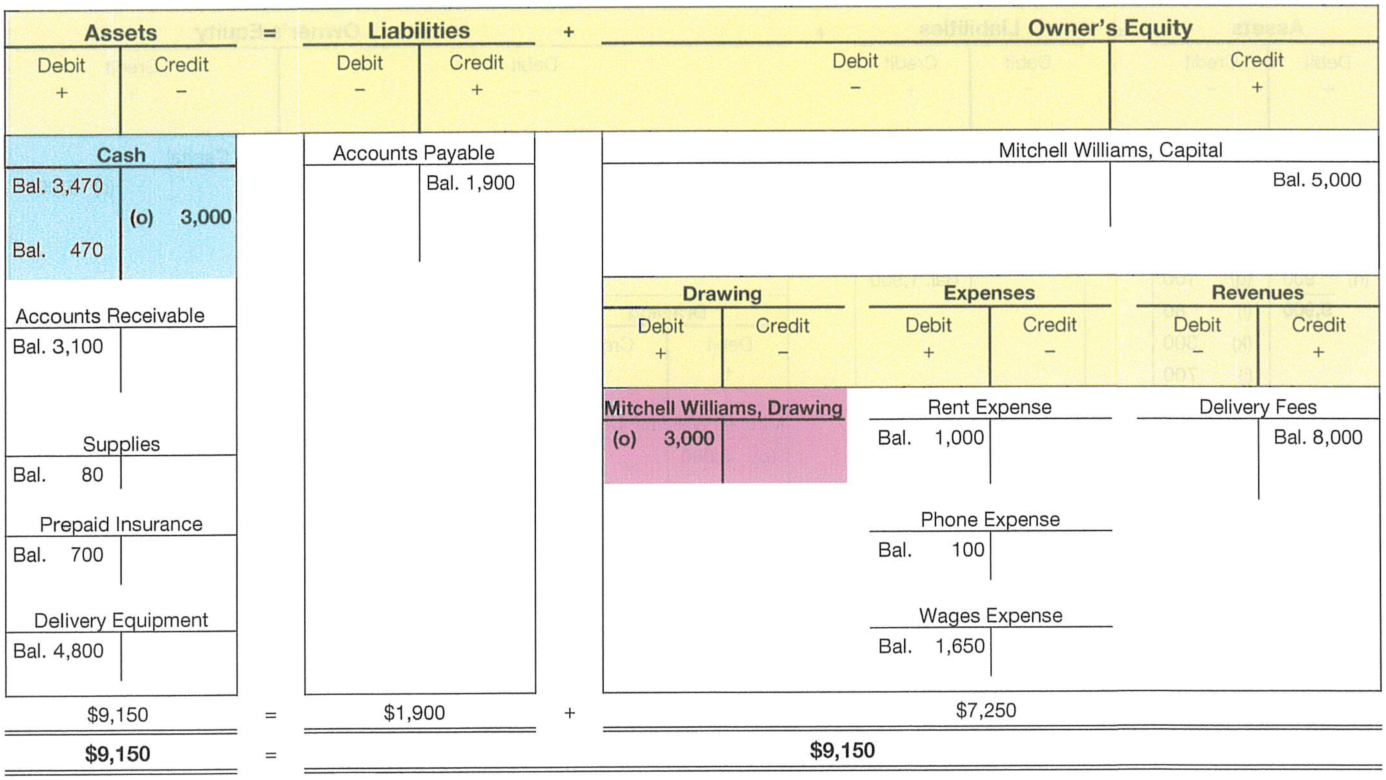
Transaction (o): Withdrawal of cash from business

At the end of the month, Mitch withdrew $3,000 in cash from the business to pay for textbooks, extra class fees, and living expenses (Figure 3-20 on the next page).

Analysis. Cash withdrawals decrease owner's equity and decrease cash. Debit Mitchell Williams, Drawing and credit Cash for $3,000.

Withdrawals are reported in the drawing account. Withdrawals by an owner are the opposite of an investment. You could debit the owner's capital account for withdrawals. However, using a specific account tells the user of the accounting information how much was withdrawn for the period.

FIGURE 3-20 Transaction (o): Withdrawal of Cash from Business



Summary of Transactions

In illustrating transactions (a) through (o), each T account for Mitchell's Campus Delivery shows a balance before and after each transaction. To focus your attention on the transaction being explained, only a single entry was shown. In practice, this is not done. Instead, each account gathers all transactions for a period. Mitchell's accounts, with all transactions listed, are shown in Figure 3-21. Note the following four items:

1. The footings are directly under the debit (left) and credit (right) sides of the T account for those accounts with more than one debit or credit.
2. The balance is shown on the side with the larger footing.
3. The footing serves as the balance for accounts with entries on only one side of the account.
4. If an account has only a single entry, it is not necessary to enter a footing or balance.

CHECKPOINT

Complete Checkpoint-3 on page 74 to test your basic understanding of LO4.

FIGURE 3-21 Summary of Transactions (a) Through (o)

Assets		=	Liabilities		+	Owner's Equity	
Debit +	Credit −		Debit −	Credit +		Debit −	Credit +

Assets

Cash	
(a) 5,000	(b) 2,000
(e) 2,100	(d) 600
(j) 1,900	(f) 1,000
(n) 900	(g) 100
9,900	(i) 80
	(k) 300
	(l) 700
	(m) 1,650
	(o) 3,000
	9,430
Bal. 470	

Accounts Receivable	
(h) 2,400	(j) 1,900
(n) 2,600	
5,000	
Bal. 3,100	

Supplies	
(i) 80	

Prepaid Insurance	
(l) 700	

Delivery Equipment	
(b) 2,000	
(c) 1,800	
(k) 1,000	
Bal. 4,800	

Liabilities

Accounts Payable	
(d) 600	(c) 1,800
	(k) 700
	2,500
	Bal. 1,900

Owner's Equity

Mitchell Williams, Capital	
	(a) 5,000

Drawing	
Debit +	Credit −

Mitchell Williams, Drawing	
(o) 3,000	

Expenses	
Debit +	Credit −

Rent Expense	
(f) 1,000	

Phone Expense	
(g) 100	

Wages Expense	
(m) 1,650	

Revenues	
Debit −	Credit +

Delivery Fees	
	(e) 2,100
	(h) 2,400
	(n) 3,500
	Bal. 8,000

Assets	=	Liabilities	+	Owner's Equity
$9,150	=	$1,900	+	$7,250
$9,150	=	**$9,150**		

LO5 The Trial Balance

Prepare a trial balance and explain its purposes and linkages with the financial statements.

Recall the following two very important rules in double-entry accounting:

1. The sum of the debits must equal the sum of the credits.

   At least two accounts are affected by each transaction. This rule is so important that many computer accounting programs will not permit a transaction to be entered into the accounting system unless the debits equal the credits.

2. The accounting equation must remain in balance.

In illustrating the transactions for Mitchell's Campus Delivery, the equality of the accounting equation was verified after each transaction. Because of the large

> **LEARNING KEY**
> A trial balance provides proof that total debits equal total credits and shows that the accounting equation is in balance.

number of transactions entered each day, this is not done in practice. Instead, a trial balance is prepared periodically to determine the equality of the debits and credits. A **trial balance** is a list of all accounts showing the title and balance of each account. By totaling the debits and credits, their equality can be tested.

A trial balance of Mitchell's accounts, taken on June 30, 20--, is shown in Figure 3-22. This date is shown on the third line of the heading. The trial balance shows that the debit and credit totals are equal in amount. This is proof that (1) in entering transactions (a) through (o), the total of the debits was equal to the total of the credits, and (2) the accounting equation has remained in balance.

A trial balance is not a formal statement or report. Normally, only the accountant sees it. As shown in Figure 3-23, a trial balance can be used as an aid in preparing the financial statements.

> Since a trial balance is not a formal statement, dollar signs are not used. Formal statements include: Income Statement, Statement of Owner's Equity, Balance Sheet, and Statement of Cash Flows.

FIGURE 3-22 Trial Balance

Mitchell's Campus Delivery
Trial Balance
June 30, 20 --

ACCOUNT TITLE	DEBIT BALANCE	CREDIT BALANCE
Cash	470 00	
Accounts Receivable	3 100 00	
Supplies	80 00	
Prepaid Insurance	700 00	
Delivery Equipment	4 800 00	
Accounts Payable		1 900 00
Mitchell Williams, Capital		5 000 00
Mitchell Williams, Drawing	3 000 00	
Delivery Fees		8 000 00
Rent Expense	1 000 00	
Phone Expense	100 00	
Wages Expense	1 650 00	
	14 900 00	14 900 00

FIGURE 3-23 Linkages Between the Trial Balance and Financial Statements

Mitchell's Campus Delivery
Trial Balance
June 30, 20 --

ACCOUNT TITLE	DEBIT BALANCE	CREDIT BALANCE
Cash	470 00	
Accounts Receivable	3 100 00	
Supplies	80 00	
Prepaid Insurance	700 00	
Delivery Equipment	4 800 00	
Accounts Payable		1 900 00
Mitchell Williams, Capital		5 000 00
Mitchell Williams, Drawing	3 000 00	
Delivery Fees		8 000 00
Rent Expense	1 000 00	
Phone Expense	100 00	
Wages Expense	1 650 00	
	14 900 00	14 900 00

(continued)

If the beginning capital balance was $5,000 and Mitch made no additional investments, the statement would be prepared as follows:

Mitchell's Campus Delivery
Statement of Owner's Equity
For Month Ended June 30, 20 --

Mitchell Williams, capital, June 1, 20 --		$5,000
Net income for 20 --	$5,250	
Less withdrawals for 20 --	3,000	
Increase in capital		2,250
Mitchell Williams, capital, June 30, 20 --		$7,250

FIGURE 3-23 Linkages Between the Trial Balance and Financial Statements (*concluded*)

Mitchell's Campus Delivery
Income Statement
For Month Ended June 30, 20 --

Revenue:		
Delivery fees		$8,000
Expenses:		
Wages expense	$1,650	
Rent expense	1,000	
Phone expense	100	
Total expenses		2,750
Net income		$5,250

Mitchell's Campus Delivery
Statement of Owner's Equity
For Month Ended June 30, 20 --

Mitchell Williams, capital, June 1, 20 --		$ —
Investments during June		5,000
Total investment		$5,000
Net income for 20 --	$5,250	
Less withdrawals for 20 --	3,000	
Increase in capital		2,250
Mitchell Williams, capital, June 30, 20 --		$7,250

Mitchell's Campus Delivery
Balance Sheet
June 30, 20 --

Assets		Liabilities	
Cash	$ 470	Accounts payable	$1,900
Accounts receivable	3,100		
Supplies	80	Owner's Equity	
Prepaid insurance	700	Mitchell Williams, capital	7,250
Delivery equipment	4,800		
Total assets	$9,150	Total liabilities and owner's equity	$9,150

CHECKPOINT

Complete Checkpoint-4 on page 74 to test your basic understanding of LO5.

SELF-STUDY

LEARNING OBJECTIVES	Key Points to Remember
LO1 Define the parts of a T account.	The parts of a T account are 1. the title, 2. the debit, or left side, and 3. the credit, or right side.

Title	
Debit = Left	Credit = Right

LEARNING OBJECTIVES — Key Points to Remember

LO2 Foot and balance a T account.

Rules for footing and balancing T accounts are:

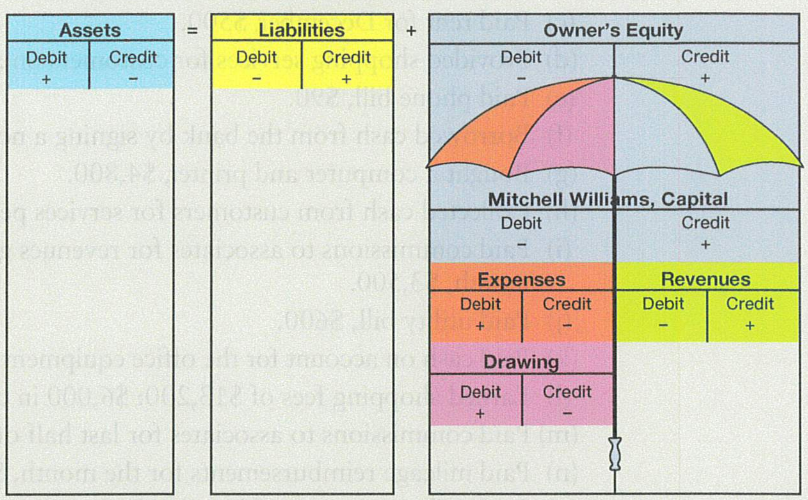
1. The footings are directly under the debit (left) and credit (right) sides of the T account for those accounts with more than one debit or credit.
2. The balance is shown on the side with the larger footing.
3. The footing serves as the balance for accounts with entries on only one side of the account.
4. If an account has only a single entry, it is not necessary to enter a footing or balance.

LO3 Describe the effects of debits and credits on specific types of accounts.

Rules for debits and credits. (See illustration below.)

1. Assets are on the left side of the accounting equation. Therefore, increases are entered on the left (debit) side of an asset account and decreases are entered on the right (credit) side.
2. Liabilities and owner's equity are on the right side of the accounting equation. Therefore, increases are entered on the right (credit) side and decreases are entered on the left (debit) side.
3. Revenues increase owner's equity. Therefore, increases are entered on the right (credit) side and decreases are entered on the left (debit) side.
4. Expenses and drawing decrease owner's equity. Therefore, increases are entered on the left (debit) side and decreases are entered on the right (credit) side.

Accounting Equation with Owner's Equity Umbrella



LO4 Use T accounts to analyze transactions.

Picture the accounting equation in your mind as you analyze transactions. When entering transactions in T accounts:

1. The sum of the debits must equal the sum of the credits.
2. At least two accounts are affected by each transaction.
3. When finished, the accounting equation must remain in balance.

LO5 Prepare a trial balance and explain its purposes and linkages with the financial statements.

A trial balance shows that the debit and credit totals are equal. A trial balance also can be used in preparing the financial statements.

DEMONSTRATION PROBLEM

Celia Pints opened We-Buy, You-Pay Shopping Services. For a fee that is based on the amount of research and shopping time required, Pints and her associates will shop for almost anything from groceries to home furnishings. Business is particularly heavy around Christmas and in early summer. The business operates from a rented store front. The associates receive a commission based on the revenues they produce and a mileage reimbursement for the use of their personal automobiles for shopping trips. Pints decided to use the following accounts to record transactions.

Assets	Owner's Equity
Cash	Celia Pints, Capital
Accounts Receivable	Celia Pints, Drawing
Office Equipment	Revenue
Computer Equipment	Shopping Fees
Liabilities	Expenses
Accounts Payable	Rent Expense
Notes Payable	Phone Expense
	Commissions Expense
	Utilities Expense
	Travel Expense

The following transactions are for the month of December 20--.

(a) Pints invested cash in the business, $30,000.
(b) Bought office equipment for $10,000. Paid $2,000 in cash and promised to pay the balance over the next four months.
(c) Paid rent for December, $500.
(d) Provided shopping services for customers on account, $5,200.
(e) Paid phone bill, $90.
(f) Borrowed cash from the bank by signing a note payable, $5,000.
(g) Bought a computer and printer, $4,800.
(h) Collected cash from customers for services performed on account, $4,000.
(i) Paid commissions to associates for revenues generated during the first half of the month, $3,500.
(j) Paid utility bill, $600.
(k) Paid cash on account for the office equipment purchased in transaction (b), $2,000.
(l) Earned shopping fees of $13,200: $6,000 in cash and $7,200 on account.
(m) Paid commissions to associates for last half of month, $7,000.
(n) Paid mileage reimbursements for the month, $1,500.
(o) Paid cash on note payable to bank, $1,000.
(p) Pints withdrew cash for personal use, $2,000.

REQUIRED

1. Enter the transactions for December in T accounts. Use the accounting equation as a guide for setting up the T accounts.
2. Foot the T accounts and determine their balances as necessary.
3. Prepare a trial balance of the accounts as of December 31 of the current year.
4. Prepare an income statement for the month ended December 31 of the current year.
5. Prepare a statement of owner's equity for the month ended December 31 of the current year.
6. Prepare a balance sheet as of December 31 of the current year.

SOLUTION 1, 2.

Assets		=	**Liabilities**		+	**Owner's Equity**	
Debit +	Credit −		Debit −	Credit +		Debit −	Credit +

Assets

Cash

Debit	Credit
(a) 30,000	(b) 2,000
(f) 5,000	(c) 500
(h) 4,000	(e) 90
(l) 6,000	(g) 4,800
45,000	(i) 3,500
	(j) 600
	(k) 2,000
	(m) 7,000
	(n) 1,500
	(o) 1,000
	(p) 2,000
	24,990
Bal. 20,010	

Accounts Receivable

Debit	Credit
(d) 5,200	(h) 4,000
(l) 7,200	
12,400	
Bal. 8,400	

Office Equipment

Debit	Credit
(b) 10,000	

Computer Equipment

Debit	Credit
(g) 4,800	

Liabilities

Accounts Payable

Debit	Credit
(k) 2,000	(b) 8,000
	Bal. 6,000

Notes Payable

Debit	Credit
(o) 1,000	(f) 5,000
	Bal. 4,000

Owner's Equity

Celia Pints, Capital

Debit	Credit
	(a) 30,000

Drawing		**Expenses**		**Revenues**	
Debit +	Credit −	Debit +	Credit −	Debit −	Credit +

Celia Pints, Drawing

Debit	Credit
(p) 2,000	

Rent Expense

Debit	Credit
(c) 500	

Phone Expense

Debit	Credit
(e) 90	

Commissions Expense

Debit	Credit
(i) 3,500	
(m) 7,000	
Bal. 10,500	

Utilities Expense

Debit	Credit
(j) 600	

Travel Expense

Debit	Credit
(n) 1,500	

Shopping Fees

Debit	Credit
	(d) 5,200
	(l) 13,200
	Bal. 18,400

Assets	=	Liabilities	+	Owner's Equity
$43,210	=	$10,000	+	$33,210
$43,210	=	**$43,210**		

SOLUTION 3.

We-Buy, You-Pay Shopping Services
Trial Balance
December 31, 20 --

ACCOUNT TITLE	DEBIT BALANCE	CREDIT BALANCE
Cash	20,010.00	
Accounts Receivable	8,400.00	
Office Equipment	10,000.00	
Computer Equipment	4,800.00	
Accounts Payable		6,000.00
Notes Payable		4,000.00
Celia Pints, Capital		30,000.00
Celia Pints, Drawing	2,000.00	
Shopping Fees		18,400.00
Rent Expense	500.00	
Phone Expense	90.00	
Commissions Expense	10,500.00	
Utilities Expense	600.00	
Travel Expense	1,500.00	
	58,400.00	58,400.00

SOLUTION 4.

We-Buy, You-Pay Shopping Services
Income Statement
For Month Ended December 31, 20 --

Revenue:		
Shopping fees		$18,400
Expenses:		
Commissions expense	$10,500	
Travel expense	1,500	
Utilities expense	600	
Rent expense	500	
Phone expense	90	
Total expenses		13,190
Net income		$ 5,210

SOLUTION 5.

We-Buy, You-Pay Shopping Services
Statement of Owner's Equity
For Month Ended December 31, 20 --

Celia Pints, capital, December 1, 20 --		$ —
Investments during December		30,000
Total investment		$30,000
Net income for December	$5,210	
Less withdrawals for December	2,000	
Increase in capital		3,210
Celia Pints, capital, December 31, 20 --		$33,210

SOLUTION 6.

We-Buy, You-Pay Shopping Services
Balance Sheet
December 31, 20 --

Assets		Liabilities	
Cash	$20,010	Accounts payable	$ 6,000
Accounts receivable	8,400	Notes payable	4,000
Office equipment	10,000	Total liabilities	$10,000
Computer equipment	4,800		
		Owner's Equity	
		Celia Pints, capital	33,210
Total assets	$43,210	Total liabilities and owner's equity	$43,210

KEY TERMS

balance (51) The difference between the footings of an account.

credit (52) To enter an amount on the right side of an account.

credit balance (54) The normal balance of liability, owner's equity, and revenue accounts.

debit (52) To enter an amount on the left side of an account.

debit balance (54) The normal balance of asset, expense, and drawing accounts.

double-entry accounting (51) A system in which each transaction has a dual effect on the accounting elements.

footings (51) The total dollar amounts on the debit and credit sides of an account.

normal balance (54) The side of an account that is increased.

trial balance (67) A list of all accounts, showing the title and balance of each account, used to prove that the sum of the debits equals the sum of the credits.

SELF-STUDY TEST QUESTIONS

True/False

1. **LO3** To debit an account is to enter an amount on the left side of the account.
2. **LO3** Liability accounts normally have debit balances.
3. **LO3** Increases in owner's equity are entered as credits.
4. **LO3** Revenue accounts normally have debit balances.
5. **LO3** To credit an account is to enter an amount on the right side of the account.
6. **LO3** A debit to an asset account will decrease it.

Multiple Choice

1. **LO3** A common example of an asset is
   (a) Professional Fees.
   (b) Rent Expense.
   (c) Accounts Receivable.
   (d) Accounts Payable.
2. **LO3** The accounting equation may be expressed as
   (a) Assets = Liabilities − Owner's Equity.
   (b) Assets = Liabilities + Owner's Equity.
   (c) Liabilities = Owner's Equity − Assets.
   (d) all of the above.
3. **LO3** Liability, owner's equity, and revenue accounts normally have
   (a) debit balances.
   (b) large balances.
   (c) negative balances.
   (d) credit balances.
4. **LO4** To record the payment of rent expense, an accountant would
   (a) debit Cash; credit Rent Expense.
   (b) debit Rent Expense; debit Cash.
   (c) debit Rent Expense; credit Cash.
   (d) credit Rent Expense; credit Cash.
5. **LO4** An investment of cash by the owner will
   (a) increase assets and owner's equity.
   (b) increase assets and liabilities.
   (c) increase liabilities and owner's equity.
   (d) increase owner's equity and decrease liabilities.

CHECKPOINT ✓

Checkpoint Exercises

1. **LO2** Foot and balance the accounts receivable T account shown below.

Accounts Receivable	
100	50
200	30

2. **LO3** Complete the following questions using either "debit" or "credit":

   (a) The asset account Supplies is increased with a __________.
   (b) The owner's capital account is increased with a __________.
   (c) The rent expense account is increased with a __________.

3. **LO4** Analyze the following transaction using the T accounts provided below. Robb Todd purchased equipment for $300 cash.

Cash		Equipment	

4. **LO5** The following accounts have normal balances. Prepare a trial balance. Accounts Payable, $20; Accounts Receivable, $90; Capital, $40; Sales, $200; Cash, $100; Rent Expense, $70.

The answers to the Self-Study Test Questions are at the end of the chapter (page 84).

APPLYING YOUR KNOWLEDGE

CengageNowv2 provides "Show Me How" videos for selected exercises and problems. Additional resources, such as Excel templates for completing selected exercises and problems, are available for download from the companion website at Cengage.com.

REVIEW QUESTIONS

LO1 1. What are the three major parts of a T account?

LO1 2. What is the left side of the T account called? the right side?

LO2 3. What is a footing?

LO3 4. What is the relationship between the revenue and expense accounts and the owner's equity account?

LO5 5. What is the function of the trial balance?

SERIES A EXERCISES

E 3-1A (LO2)
✓ Cash bal.: $1,200 (Dr.)

FOOT AND BALANCE A T ACCOUNT Foot and balance the cash T account shown below.

Cash	
500	100
400	200
600	

E 3-2A (LO3)

DEBIT AND CREDIT ANALYSIS Complete the following statements using either "debit" or "credit":

(a) The cash account is increased with a ______________.
(b) The owner's capital account is increased with a ______________.
(c) The delivery equipment account is increased with a ______________.
(d) The cash account is decreased with a ______________.
(e) The liability account Accounts Payable is increased with a ______________.
(f) The revenue account Delivery Fees is increased with a ______________.
(g) The asset account Accounts Receivable is increased with a ______________.
(h) The rent expense account is increased with a ______________.
(i) The owner's drawing account is increased with a ______________.

E 3-3A (LO2/3/4)
✓ Cash bal. after (c): $3,100 (Dr.)

ANALYSIS OF T ACCOUNTS Richard Gibbs began a business called Richard's Shoe Repair.

1. Create T accounts for Cash; Supplies; Richard Gibbs, Capital; and Utilities Expense. Identify the following transactions by letter and place them on the proper side of the T accounts:

   (a) Invested cash in the business, $6,500.
   (b) Purchased supplies for cash, $700.
   (c) Paid utility bill, $2,700.

2. Foot the T account for cash and enter the ending balance.

E 3-4A (LO3)

NORMAL BALANCE OF ACCOUNT Indicate the normal balance (debit or credit) for each of the following accounts:

1. Cash
2. Wages Expense
3. Accounts Payable
4. Owner's Drawing
5. Supplies
6. Owner's Capital
7. Equipment

E 3-5A (LO4)

TRANSACTION ANALYSIS Linda Kipp started a business on May 1, 20--. Analyze the following transactions for the first month of business using T accounts. Label each T account with the title of the account affected and then place the transaction letter and the dollar amount on the debit or credit side.

(a) Invested cash in the business, $5,000.
(b) Bought equipment for cash, $700.
(c) Bought equipment on account, $600.
(d) Paid cash on account for equipment purchased in transaction (c), $400.
(e) Withdrew cash for personal use, $900.

E 3-6A (LO2)
✓ Cash bal. after (e): $3,000 (Dr.)

FOOT AND BALANCE T ACCOUNTS Foot and balance the T accounts prepared in Exercise 3-5A if necessary.

E 3-7A (LO2/4)
✓ Cash bal. after (k): $24,400 (Dr.)

ANALYSIS OF TRANSACTIONS Charles Chadwick opened a business called Charlie's Detective Service in January 20--. Set up T accounts for the following accounts: Cash; Accounts Receivable; Office Supplies; Computer Equipment; Office Furniture; Accounts Payable; Charles Chadwick, Capital; Charles Chadwick, Drawing; Professional Fees; Rent Expense; and Utilities Expense.

The following transactions occurred during the first month of business. Record these transactions in T accounts. After all transactions are recorded, foot and balance the accounts if necessary.

(a) Invested cash in the business, $30,000.
(b) Bought office supplies for cash, $300.
(c) Bought office furniture for cash, $5,000.
(d) Purchased computer and printer on account, $8,000.
(e) Received cash from clients for services, $3,000.
(f) Paid cash on account for computer and printer purchased in transaction (d), $4,000.
(g) Earned professional fees on account during the month, $9,000.
(h) Paid cash for office rent for January, $1,500.
(i) Paid utility bills for the month, $800.
(j) Received cash from clients billed in transaction (g), $6,000.
(k) Withdrew cash for personal use, $3,000.

E 3-8A (LO5)
✓ Trial bal. total debits: $46,000

TRIAL BALANCE Based on the transactions recorded in Exercise 3-7A, prepare a trial balance for Charlie's Detective Service as of January 31, 20--.

E 3-9A (LO5)
✓ Trial bal. total debits: $42,800

TRIAL BALANCE The following accounts have normal balances. Prepare a trial balance for Kenny's Lawn Service as of September 30, 20--.

Cash	$10,000
Accounts Receivable	6,000
Supplies	1,600
Prepaid Insurance	1,200
Mowing Equipment	16,000
Accounts Payable	4,000
Kenny Young, Capital	20,000
Kenny Young, Drawing	2,000
Mowing Fees	18,800
Wages Expense	4,200
Rent Expense	1,800

E 3-10A, E 3-11A, E 3-12A

Provided below is a trial balance for Juanita's Delivery Service. **Use this trial balance for Exercises 3-10A, 3-11A, and 3-12A.**

Juanita's Delivery Service
Trial Balance
September 30, 20 --

ACCOUNT TITLE	DEBIT BALANCE	CREDIT BALANCE
Cash	5 0 0 0 00	
Accounts Receivable	3 0 0 0 00	
Supplies	8 0 0 00	
Prepaid Insurance	6 0 0 00	
Delivery Equipment	8 0 0 0 00	
Accounts Payable		2 0 0 0 00
Juanita Raye, Capital		10 0 0 0 00
Juanita Raye, Drawing	1 0 0 0 00	
Delivery Fees		9 4 0 0 00
Wages Expense	2 1 0 0 00	
Rent Expense	9 0 0 00	
	21 4 0 0 00	21 4 0 0 00

E 3-10A (LO5)
✓ Net income: $6,400

INCOME STATEMENT From the information in the trial balance presented above, prepare an income statement for Juanita's Delivery Service for the month ended September 30, 20--.

E 3-11A (LO5)
✓ Capital, 9/30: $15,400

STATEMENT OF OWNER'S EQUITY From the information in the trial balance presented above, prepare a statement of owner's equity for Juanita's Delivery Service for the month ended September 30, 20--. Assume this is not the first month of operations and the owner did not invest in the business during September.

E 3-12A (LO5)
✓ Total assets, 9/30: $17,400

BALANCE SHEET From the information in the trial balance presented for Juanita's Delivery Service on page 76, prepare a balance sheet for Juanita's Delivery Service as of September 30, 20--.

SERIES A PROBLEMS

P 3-13A (LO2/4/5)
✓ Cash bal. after (p): $21,805 (Dr.)
✓ Trial bal. total debits: $44,900

T ACCOUNTS AND TRIAL BALANCE Wilhelm Kohl started a business in May 20-- called Kohl's Home Repair. Kohl hired a part-time college student as an assistant. Kohl has decided to use the following accounts for recording transactions:

Assets	Owner's Equity
Cash	Wilhelm Kohl, Capital
Accounts Receivable	Wilhelm Kohl, Drawing
Office Supplies	Revenue
Prepaid Insurance	Service Fees
Equipment	Expenses
Van	Rent Expense
Liabilities	Wages Expense
Accounts Payable	Phone Expense
	Gas and Oil Expense

The following transactions occurred during May:

(a) Invested cash in the business, $25,000.
(b) Purchased a used van for cash, $6,000.
(c) Purchased equipment on account, $4,000.
(d) Received cash for services rendered, $7,500.
(e) Paid cash on account owed from transaction (c), $2,300.
(f) Paid rent for the month, $850.
(g) Paid phone bill, $230.
(h) Earned revenue on account, $4,500.
(i) Purchased office supplies for cash, $160.
(j) Paid wages to an assistant, $800.
(k) Purchased a one-year insurance policy, $1,100.
(l) Received cash from services performed in transaction (h), $3,400.
(m) Paid cash for gas and oil expense on the van, $155.
(n) Purchased additional equipment for $4,200, paying $1,500 cash and spreading the remaining payments over the next 10 months.
(o) Earned service fees for the remainder of the month of $3,500: $1,900 in cash and $1,600 on account.
(p) Withdrew cash at the end of the month, $2,900.

REQUIRED

1. Enter the transactions in T accounts, identifying each transaction with its corresponding letter.
2. Foot and balance the accounts where necessary.
3. Prepare a trial balance as of May 31, 20--.

P 3-14A (LO5)
✓ Net income: $13,465
✓ Owner's equity, 5/31: $35,565
✓ Total assets, 5/31: $39,965

NET INCOME AND CHANGE IN OWNER'S EQUITY Refer to the trial balance of Kohl's Home Repair in Problem 3-13A to determine the following information. Use the format provided below.

1. a. Total revenue for the month ________
   b. Total expenses for the month ________
   c. Net income for the month ________
2. a. Wilhelm Kohl's original investment in the business ________
   + Net income for the month ________
   − Owner's drawing ________
   Increase (decrease) in capital ________
   = Ending owner's equity ________
   b. End of month accounting equation:

Assets	=	Liabilities	+	Owner's Equity
________	=	________	+	________

P 3-15A (LO5)
✓ NI: $13,465
✓ Capital, 5/31/20--: $35,565
✓ Total assets 5/31/20--: $39,965

FINANCIAL STATEMENTS Refer to the trial balance in Problem 3-13A and to the analysis of the change in owner's equity in Problem 3-14A.

REQUIRED

1. Prepare an income statement for Kohl's Home Repair for the month ended May 31, 20--.
2. Prepare a statement of owner's equity for Kohl's Home Repair for the month ended May 31, 20--.
3. Prepare a balance sheet for Kohl's Home Repair as of May 31, 20--.

SERIES B EXERCISES

E 3-1B (LO2)
✓ Accts. Pay: $400 (Cr.)

FOOT AND BALANCE A T ACCOUNT Foot and balance the accounts payable T account shown below.

Accounts Payable	
300	450
250	350
	150

E 3-2B (LO3)

DEBIT AND CREDIT ANALYSIS Complete the following statements using either "debit" or "credit":

(a) The asset account Prepaid Insurance is increased with a ________.
(b) The owner's drawing account is increased with a ________.

(c) The asset account Accounts Receivable is decreased with a ________.
(d) The liability account Accounts Payable is decreased with a ________.
(e) The owner's capital account is increased with a ________.
(f) The revenue account Professional Fees is increased with a ________.
(g) The expense account Repair Expense is increased with a ________.
(h) The asset account Cash is decreased with a ________.
(i) The asset account Delivery Equipment is decreased with a ________.

E 3-3B (LO2/3/4)
✓ Cash bal. after (c): $3,900 (Dr.)

ANALYSIS OF T ACCOUNTS Roberto Alvarez began a business called Roberto's Fix-It Shop.

1. Create T accounts for Cash; Supplies; Roberto Alvarez, Capital; and Utilities Expense. Identify the following transactions by letter and place them on the proper side of the T accounts:
   (a) Invested cash in the business, $6,000.
   (b) Purchased supplies for cash, $1,200.
   (c) Paid utility bill, $900.
2. Foot the T account for cash and enter the ending balance.

E 3-4B (LO3)

NORMAL BALANCE OF ACCOUNT Indicate the normal balance (debit or credit) for each of the following accounts:

1. Cash
2. Rent Expense
3. Notes Payable
4. Owner's Drawing
5. Accounts Receivable
6. Owner's Capital
7. Tools

E 3-5B (LO4)

TRANSACTION ANALYSIS George Atlas started a business on June 1, 20--. Analyze the following transactions for the first month of business using T accounts. Label each T account with the title of the account affected and then place the transaction letter and the dollar amount on the debit or credit side.

(a) Invested cash in the business, $7,000.
(b) Purchased equipment for cash, $900.
(c) Purchased equipment on account, $1,500.
(d) Paid cash on account for equipment purchased in transaction (c), $800.
(e) Withdrew cash for personal use, $1,100.

E 3-6B (LO2)
✓ Cash bal. after (e): $4,200 (Dr.)

FOOT AND BALANCE T ACCOUNTS Foot and balance the T accounts prepared in Exercise 3-5B if necessary.

E 3-7B (LO2/4)
✓ Cash bal. after (k): $9,000 (Dr.)

ANALYSIS OF TRANSACTIONS Nicole Lawrence opened a business called Nickie's Neat Ideas in January 20--. Set up T accounts for the following accounts: Cash; Accounts Receivable; Office Supplies; Computer Equipment; Office Furniture; Accounts Payable; Nicole Lawrence, Capital; Nicole Lawrence, Drawing; Professional Fees; Rent Expense; and Utilities Expense.

The following transactions occurred during the first month of business. Record these transactions in T accounts. After all transactions have been recorded, foot and balance the accounts if necessary.

(a) Invested cash in the business, $18,000.
(b) Purchased office supplies for cash, $500.
(c) Purchased office furniture for cash, $8,000.
(d) Purchased computer and printer on account, $5,000.
(e) Received cash from clients for services, $4,000.
(f) Paid cash on account for computer and printer purchased in transaction (d), $2,000.
(g) Earned professional fees on account during the month, $7,000.
(h) Paid office rent for January, $900.
(i) Paid utility bills for the month, $600.
(j) Received cash from clients that were billed previously in transaction (g), $3,000.
(k) Withdrew cash for personal use, $4,000.

E 3-8B (LO5)
✓ Trial bal. total debits: $32,000

TRIAL BALANCE Based on the transactions recorded in Exercise 3-7B, prepare a trial balance for Nickie's Neat Ideas as of January 31, 20--.

E 3-9B (LO5)
✓ Trial bal. total debits: $55,000

TRIAL BALANCE The following accounts have normal balances. Prepare a trial balance for Betty's Cleaning Service as of September 30, 20--.

Cash	$14,000	Betty Par, Capital	$24,000
Accounts Receivable	8,000	Betty Par, Drawing	4,000
Supplies	1,200	Cleaning Fees	25,000
Prepaid Insurance	1,800	Wages Expense	6,000
Cleaning Equipment	18,000	Rent Expense	2,000
Accounts Payable	6,000		

E 3-10B, E 3-11B, E 3-12B

Provided below is a trial balance for Bill's Delivery Service. **Use this trial balance for Exercises 3-10B, 3-11B, and 3-12B.**

Bill's Delivery Service
Trial Balance
September 30, 20--

ACCOUNT TITLE	DEBIT BALANCE	CREDIT BALANCE
Cash	7,000.00	
Accounts Receivable	4,000.00	
Supplies	600.00	
Prepaid Insurance	900.00	
Delivery Equipment	9,000.00	
Accounts Payable		3,000.00
Bill Swift, Capital		12,000.00
Bill Swift, Drawing	2,000.00	
Delivery Fees		12,500.00
Wages Expense	3,000.00	
Rent Expense	1,000.00	
	27,500.00	27,500.00

E 3-10B (LO5)
✓ Net income: $8,500

INCOME STATEMENT From the information in the trial balance presented above, prepare an income statement for Bill's Delivery Service for the month ended September 30, 20--.

3-11B (LO5)
✓ Capital, 9/30: $18,500

STATEMENT OF OWNER'S EQUITY From the information in the trial balance presented above, prepare a statement of owner's equity for Bill's Delivery Service for the month ended September 30, 20--. Assume this is not the first month of operations and the owner did not invest in the business during September.

E 3-12B (LO5)
✓ Total assets, 9/30: $21,500

BALANCE SHEET From the information in the trial balance presented for Bill's Delivery Service on page 80, prepare a balance sheet for Bill's Delivery Service as of September 30, 20--.

SERIES B PROBLEMS

P 3-13B (LO2/4/5)
✓ Cash bal. after (p): $20,200 (Dr.)
✓ Trial bal. total debits: $44,300

T ACCOUNTS AND TRIAL BALANCE Sue Jantz started a business in August 20-- called Jantz Plumbing Service. Jantz hired a part-time college student as an administrative assistant. Jantz has decided to use the following accounts:

Assets	Owner's Equity
Cash	Sue Jantz, Capital
Accounts Receivable	Sue Jantz, Drawing
Office Supplies	Revenue
Prepaid Insurance	Service Fees
Plumbing Equipment	Expenses
Van	Rent Expense
Liabilities	Wages Expense
Accounts Payable	Phone Expense
	Advertising Expense

The following transactions occurred during August:

(a) Invested cash in the business, $30,000.
(b) Purchased a used van for cash, $8,000.
(c) Purchased plumbing equipment on account, $4,000.
(d) Received cash for services rendered, $3,000.
(e) Paid cash on account owed from transaction (c), $1,000.
(f) Paid rent for the month, $700.
(g) Paid phone bill, $100.
(h) Earned revenue on account, $4,000.
(i) Purchased office supplies for cash, $300.
(j) Paid wages to student, $500.
(k) Purchased a one-year insurance policy, $800.
(l) Received cash from services performed in transaction (h), $3,000.
(m) Paid cash for advertising expense, $2,000.
(n) Purchased additional plumbing equipment for $2,000, paying $500 cash and spreading the remaining payments over the next six months.
(o) Earned revenue from services for the remainder of the month of $2,800: $1,100 in cash and $1,700 on account.
(p) Withdrew cash at the end of the month, $3,000.

REQUIRED

1. Enter the transactions in T accounts, identifying each transaction with its corresponding letter.
2. Foot and balance the accounts where necessary.
3. Prepare a trial balance as of August 31, 20--.

P 3-14B (LO5)
✓ Net income: $6,500
✓ Owner's equity, 8/31: $33,500
✓ Total assets, 8/31: $38,000

NET INCOME AND CHANGE IN OWNER'S EQUITY Refer to the trial balance of Jantz Plumbing Service in Problem 3-13B to determine the following information. Use the format provided below.

1. a. Total revenue for the month ________
   b. Total expenses for the month ________
   c. Net income for the month ________
2. a. Sue Jantz's original investment in the business ________
   + Net income for the month ________
   − Owner's drawing ________ ________
   Increase (decrease) in capital ________
   = Ending owner's equity ________
   b. End of month accounting equation:

Assets	=	Liabilities	+	Owner's Equity
________	=	________	+	________

P 3-15B (LO5)
✓ NI: $6,500
✓ Capital, 8/31/20--: $33,500
✓ Total assets, 8/31/20--: $38,000

FINANCIAL STATEMENTS Refer to the trial balance in Problem 3-13B and to the analysis of the change in owner's equity in Problem 3-14B.

REQUIRED

1. Prepare an income statement for Jantz Plumbing Service for the month ended August 31, 20--.
2. Prepare a statement of owner's equity for Jantz Plumbing Service for the month ended August 31, 20--.
3. Prepare a balance sheet for Jantz Plumbing Service as of August 31, 20--.

CHECK LIST
- ☐ **Managing**
- ☐ **Planning**
- ☐ **Drafting**
- ☐ **Break**
- ☐ **Revising**
- ☐ **Managing**

MANAGING YOUR WRITING

Write a one-page memo to your instructor explaining how you could use the double-entry system to maintain records of your personal finances. What types of accounts would you use for the accounting elements?

✓ Cash bal. after (p): $1,980 (Dr.)
✓ Trial bal. debit total: $5,840
✓ Net income: $500
✓ Total assets: $4,300

MASTERY PROBLEM

Craig Fisher started a lawn service called Craig's Quick Cut to earn money over the summer months. Fisher has decided to use the following accounts for recording transactions:

(continued)

Assets
- Cash
- Accounts Receivable
- Mowing Equipment
- Lawn Tools

Liabilities
- Accounts Payable
- Notes Payable

Owner's Equity
- Craig Fisher, Capital
- Craig Fisher, Drawing

Revenue
- Lawn Fees

Expenses
- Rent Expense
- Wages Expense
- Phone Expense
- Gas and Oil Expense
- Transportation Expense

Transactions for the month of June are listed below.

(a) Invested cash in the business, $3,000.

(b) Bought mowing equipment for $1,000: paid $200 in cash and promised to pay the balance over the next four months.

(c) Paid garage rent for June, $50.

(d) Provided lawn services for customers on account, $520.

(e) Paid phone bill, $30.

(f) Borrowed cash from the bank by signing a note payable, $500.

(g) Bought lawn tools, $480.

(h) Collected cash from customers for services performed on account in transaction (d), $400.

(i) Paid associates for lawn work done during the first half of the month, $350.

(j) Paid for gas and oil for the equipment, $60.

(k) Paid cash on account for the mowing equipment purchased in transaction (b), $200.

(l) Earned lawn fees of $1,320: $600 in cash and $720 on account.

(m) Paid associates for last half of month, $700.

(n) Reimbursed associates for costs incurred using their own vehicles for transportation, $150.

(o) Paid on note payable to bank, $100.

(p) Withdrew cash for personal use, $200.

REQUIRED

1. Enter the transactions for June in T accounts. Use the accounting equation as a guide for setting up the T accounts.
2. Foot and balance the T accounts where necessary.
3. Prepare a trial balance of the accounts as of June 30, 20--.
4. Prepare an income statement for the month ended June 30, 20--.
5. Prepare a statement of owner's equity for the month ended June 30, 20--.
6. Prepare a balance sheet as of June 30, 20--.

This problem challenges you to apply your cumulative accounting knowledge to move a step beyond the material in the chapter.

✓ Capital, 8/31/20--: $600

CHALLENGE PROBLEM

Your friend Chris Stevick started a part-time business in June and has been keeping her own accounting records. She has been preparing monthly financial statements. At the end of August, she stopped by to show you her performance for the most recent month. She prepared the following income statement and balance sheet:

Income Statement		Balance Sheet	End of Month	Beginning of Month
Revenues	$500	Cash	$600	$400
Expenses	200	Capital	600	400
Net income	$300			

Chris has also heard that there is a statement of owner's equity, but she is not familiar with that statement. She asks if you can help her prepare one. After confirming that she has no assets other than cash, no liabilities, and made no additional investments in the business in August, you agree.

REQUIRED

1. Prepare the statement of owner's equity for your friend's most recent month.
2. What suggestions might you give to Chris that would make her income statement more useful?

ANSWERS TO SELF-STUDY TEST QUESTIONS

True/False

1. T
2. F (Liability accounts normally have credit balances.)
3. T
4. F (credit balances)
5. T
6. F (increase)

Multiple Choice

1. c 2. b 3. d 4. c 5. a

Checkpoint Exercises

1\.

Accounts Receivable	
100	50
200	30
300	80
Bal. 220	

2\. (a) The asset account Supplies is increased with a debit.
(b) The owner's capital account is increased with a credit.
(c) The rent expense account is increased with a debit.

3\.

Cash	
300	

Equipment	
300	

4\.

Trial Balance		
Cash	100	
Accounts Receivable	90	
Accounts Payable		20
Capital		40
Sales		200
Rent Expense	70	
	260	260