

Asset, Liability, and Owner's Equity Accounts

Accounting Terminology

- Account
- Account balance
- Credit
- Debit
- General ledger
- Pencil footing
- Source document

Account: Record showing increases and decreases in a single asset, liability, or owner's equity item.

Debit Side: Left side of an account.

Credit Side: Right side of an account.

General Ledger: Entire group of accounts for a business's assets, liabilities, and owner's equity.

OBJECTIVES

Upon completion of this chapter, you should be able to:

1. Set up T accounts.
2. Enter opening balances in T accounts.
3. Record debits and credits in asset, liability, and owner's equity accounts.
4. Foot and balance the accounts.
5. Prove the fundamental accounting equation.

INTRODUCTION

In the first two chapters, the effects of business transactions were analyzed and recorded through the use of the basic accounting equation: $\text{Assets} = \text{Liabilities} + \text{Owner's Equity}$. However, keeping actual records in this way would be very difficult and time consuming. Businesses therefore use a *separate* record, known as an **account**, for each asset, liability, and owner's equity item. ■

■ THE FORM OF ACCOUNTS

The simplest form of an account looks like the letter "T" and is therefore called a **T account**. The name of the account is written at the top of the form. The left side of the account is known as the **debit side**. The right side is referred to as the **credit side**.

Account Name	
Debit side	Credit side

The entire group of accounts that a business uses for its assets, liabilities, and owner's equity is known as the **general ledger**.

■ OPENING ACCOUNTS FOR THE BALANCE SHEET ITEMS

Look again at the beginning balance sheet for Van Lieu Creative Solutions, shown on page 5. The assets are listed on the left side of the balance sheet. Similarly, the beginning amount of each asset is entered on the left side—the debit side—of its account. The assets of Van Lieu Creative Solutions appear in the accounts as shown on page 15.

Cash		Furniture and Equipment	
10,000		7,000	

Liabilities are listed on the right side of the balance sheet. Similarly, the beginning amounts are recorded on the right side—the credit side—of each liability account. The amount of owner's equity, representing the owner's investment, is also listed on the right side of the balance sheet. It is therefore entered on the right side—the credit side—of the capital account. Thus the amounts for the liability Accounts Payable and the owner's equity of Van Lieu Creative Solutions appear in the accounts as shown below.

Accounts Payable		Rebecca Van Lieu, Capital	
	5,000		12,000

Entering an amount on the left side of an account is known as *debiting* the account. Entering an amount on the right side is known as *crediting* the account. The amount entered is called a *debit* or a *credit* according to the side on which it is recorded. The abbreviation accountants use for debit is *Dr.* and for credit it is *Cr.* The abbreviation *Dr.* for debit comes from the Latin word *debitor*. A debtor is one who owes. *Cr.* comes from *creditor* which, in Latin, means someone who is trusted.

The illustration below shows how the beginning amounts (opening balances) were recorded in the T accounts for Van Lieu Creative Solutions. Note that the asset accounts were debited, but the liability Accounts Payable and the owner's capital account were credited. Now that all the balance sheet accounts have been opened, the amounts on the left side of the asset accounts (debits) are equal to the amounts on the right side of the liability and owner's equity accounts (credits). The total of the debits is \$17,000, and the total of the credits is also \$17,000. This is the same as the total on each side of the balance sheet.

Cash		Accounts Payable	
10,000			5,000
Furniture and Equipment		Rebecca Van Lieu, Capital	
7,000			12,000
Total Debits		Total Credits	
\$17,000		\$17,000	
=			

In addition to a method for recording the opening balances, a business needs a way to record later increases and decreases in asset accounts. Increases in an asset account must be added to the opening balance. This can easily be done if each increase is recorded on the same side (the debit side) and listed just below the previous entry. Decreases in an asset account are of an opposite nature and must be kept separate from increases. Therefore, the right, or credit, side is used for decreases.

Since the opening balances of the liability account and the owner's equity account were entered on the right, or credit, side of the accounts, any increases in them must also be entered on that side. Decreases must be entered on the left, or debit, side.

The entry for a business transaction must include at least one debit and one credit. The procedure for recording each part of the transaction depends on two considerations: (1) the kind of account affected (asset, liability, or owner's equity) and (2) whether an increase or a decrease is involved.

Debiting: Entering an amount on the left side of an account.

Crediting: Entering an amount on the right side of an account.

Rules for Debiting and Crediting

Asset Accounts:

- Record increases as debits.
- Record decreases as credits.

Liability and Owner's Equity Accounts:

- Record increases as credits.
- Record decreases as debits.

DEBIT	ASSET ACCOUNTS	CREDIT
<p>The original amount is entered on this (debit) side.</p> <p>Increases are entered on this side.</p>	<p>Decreases are entered on this (credit) side.</p>	
DEBIT	LIABILITY AND OWNER'S EQUITY ACCOUNTS	CREDIT
<p>Decreases are entered on this (debit) side.</p>	<p>The original amount is entered on this (credit) side.</p> <p>Increases are entered on this side.</p>	

■ RECORDING CHANGES IN ACCOUNTS

To see how changes are entered in accounts, let us review the transactions of Van Lieu Creative Solutions. Remember that each transaction will affect at least two accounts.

Recording Increases and Decreases in Asset Accounts. Transaction (a) involved the purchase of additional furniture for \$800. This transaction resulted in an increase in one asset (Furniture and Equipment) and a decrease in another asset (Cash).

The increase of \$800 in the asset Furniture and Equipment is entered on the debit side of the Furniture and Equipment account because increases in assets are recorded as debits. The offsetting \$800 decrease in the asset Cash is entered on the credit side of the Cash account because decreases in assets are recorded as credits.

The paper evidence of transactions are called *source documents*. Any paperwork containing information that affects an account can be a source document. Some examples include checks, receipts, and shipping documents.

Source Documents: Paper evidence of a transaction.

Furniture and Equipment		Cash	
	7,000	10,000	
(a)	800	(a)	800

The \$9,200 left in the Cash account (a debit of \$10,000 minus a credit of \$800) is known as the *balance* of the account. The balance is computed by subtracting the smaller amount (\$800) from the larger amount (\$10,000). Because the debit side of the Cash account is larger, this account is said to have a *debit balance*.

Account Balance:
Difference between total debits and total credits in an account.

Recording Decreases in Liability Accounts. Transaction (b) involved the \$500 check given to Micro Systems in partial payment for the office equipment. This transaction caused a decrease of \$500 in the liability Accounts Payable and a decrease of \$500 in the asset Cash.

The original amount of the Accounts Payable (\$5,000) is on the credit side of the account. The decrease of \$500 is entered on the debit side to show a decrease in the amount owed. The balance of Accounts Payable is now \$4,500 (a credit of \$5,000 minus a debit of \$500). Note that this account has a *credit balance*.

The \$500 decrease in the asset Cash is entered on the credit side of the Cash account because decreases in assets are recorded as credits. The balance of the Cash account is now \$8,700 (a debit of \$10,000 minus credits of \$1,300).

Cash		Accounts Payable	
10,000			5,000
	(a) 800	(b) 500	
	(b) 500		

Recording Increases in the Owner's Equity Account. Transaction (c) involved Rebecca Van Lieu's additional cash investment of \$2,000 in the business. This transaction caused a \$2,000 increase in the asset Cash and a \$2,000 increase in the owner's equity Rebecca Van Lieu, Capital.

The Cash account is debited for \$2,000 to record an increase. The increase of \$2,000 in Rebecca Van Lieu, Capital is entered on the credit side because increases in the owner's equity are recorded as credits. After this transaction is recorded, the Cash account has a balance of \$10,700 (debits of \$12,000 minus credits of \$1,300) and the capital account has a balance of \$14,000 (credits of \$12,000 and \$2,000).

Cash		Rebecca Van Lieu, Capital	
	10,000	(a)	800
(c)	2,000	(b)	500
		(c)	2,000

Recording Increases in Liability Accounts. In Transaction (d), Van Lieu borrowed \$1,000 from the bank. This transaction caused a \$1,000 increase in the asset Cash and a \$1,000 increase in the new liability account, Loans Payable.

The Cash account is debited for \$1,000 to record the increase in the asset. The increase of \$1,000 in Loans Payable is entered on the credit side because increases in liabilities are recorded as credits.

Cash		Loans Payable	
	10,000	(a)	800
(c)	2,000	(b)	500
(d)	1,000		(d)
			1,000

Transaction (e) also caused an increase in an asset account and an increase in a liability account. In this transaction, Van Lieu bought a copier/fax machine for \$2,500 and agreed to pay for it in 60 days. As a result of the transaction, there was a \$2,500 increase in the asset Furniture and Equipment and a \$2,500 increase in the liability Accounts Payable.

The Furniture and Equipment account is debited for \$2,500 to show the increase in this asset. The increase of \$2,500 in Accounts Payable is entered on the credit side because increases in liabilities are recorded as credits.

Furniture and Equipment		Accounts Payable	
	7,000	(b)	500
(a)	800		(e)
(e)	2,500		2,500

■ FINDING THE BALANCES OF ACCOUNTS

The balance of an account can easily be found whenever that information is needed. If there are entries on only one side of the account, the procedure for finding the balance is as follows: (1) All the amounts recorded in the account are added, and (2) the total is written in small pencil figures at the foot (bottom) of the column of amounts. Look at the Furniture and Equipment account given here. Because there are no entries on the credit side, the total of the debits (\$10,300) is the account balance.

The normal balance of an account is on the increase side.

WWW Inquiry

Find the URL address for Coca-Cola. What is the gross profit on its income statement for the last available year?

Furniture and Equipment	
	7,000
(a)	800
(e)	2,500
	10,300

Pencil Footing: Total or balance written in small pencil figures.

A total or balance written in small pencil figures is called a *pencil footing*. Pencil is used to set these amounts apart from the regular entries, which are written in ink. To *foot* or *pencil-foot* a column of figures means to total the figures.

If there are entries on both sides of an account, additional steps are involved in computing the balance: (1) The debits and credits are each added. (2) The totals are pencil-footed on each side of the account. (3) The smaller total is subtracted from the larger total. (4) The difference—the balance—is pencil-footed on the side with the larger total.

The Accounts Payable account shown on page 21 has a credit balance of \$7,000 (credits of \$7,500 minus debits of \$500). There is no need to pencil-foot the debit side because it contains only one amount. However, the credit side has two pencil footings—the total of the credits (\$7,500) and the account balance (\$7,000).

Accounts Payable	
(b)	500
	(e)
	7,000
	5,000
	2,500
	7,500

■ USING ACCOUNT BALANCES TO PROVE THE ACCOUNTING EQUATION

WWW Inquiry

Find the URL address for JC Penney. What amount of dividends were declared in the last year? (Hint: go to the Five Year Financial Summary)

Once the account balances have been computed, they can be used to prove the accounting equation. The balance of \$11,700 in the Cash account plus the balance of \$10,300 in the Furniture and Equipment account equals the total assets of \$22,000. The balances of \$1,000 in Loans Payable and \$7,000 in Accounts Payable and the balance of \$14,000 in the capital account also total \$22,000. Thus the equation is in balance.

Assets	=	Liabilities	+	Owner's Equity
\$22,000	=	\$8,000	+	\$14,000

CHAPTER 3 SUMMARY

- A separate account is kept for every asset, liability, and owner's equity item in a business. The accounts are used to record the increases and decreases caused by daily transactions. All accounts together are known as the general ledger.
- Two things must be considered when analyzing and recording each part of a business transaction: (1) the kind of account affected (asset, liability, or owner's equity) and (2) whether an increase or decrease is involved.
- The left side of an account is the debit side, and the right side is the credit side.
- The following rules apply when business transactions are analyzed and recorded.
 1. Increases in assets are recorded as debits.
 2. Decreases in assets are recorded as credits.
 3. Increases in liabilities and in owner's equity are recorded as credits.
 4. Decreases in liabilities and in owner's equity are recorded as debits.
- An account balance is the difference between the total debits and the total credits in an account.

- A total or balance written in small pencil figures is called a pencil footing. Pencil is used to set these amounts apart from the regular entries, which are written in ink.
- To foot or pencil-foot a column of figures means to total the figures.

CHAPTER APPLICATIONS

EXERCISES

Complete the following assignments on the forms provided in your workbook.

EXERCISE 3-1

Analyzing transactions in T accounts. Transactions have been entered in the T accounts shown. The debit

Cash				Equipment			
(Ex.)	20,000	(a)	400	(a)	400	(c)	400
(c)	400	(d)	500	(b)	1,000		
(e)	5,000						
Accounts Payable				Dorothy Susan Simmons, Capital			
(d)	500	(b)	1,000			(Ex.)	20,000
						(e)	5,000

and credit amounts for each transaction are identified by the same letter.

Instructions:

Analyze the accounts and provide an explanation for each entry.

Example: *Simmons invested \$20,000 in her business.*

EXERCISE 3-2

Computing balances and proving the account equation. This is a continuation of Exercise 3-1. Refer to the T accounts in Exercise 3-1

Instructions:

1. Compute the balance of each account.
2. Total the asset account balances and complete the equation: Assets = Liabilities + Owner's Equity.

EXERCISE 3-3

Accounting for assets, liabilities, and owner's equity.

Instructions:

1. Set up T accounts for Cash, Supplies, Office Equipment, Accounts Payable, and John Nori, Capital.
2. Analyze and record each of the following transactions in the T accounts. Identify each part of an entry by writing the letter of the transaction next to the amount.
3. Compute and enter the balance on the appropriate side of the account.
4. Total the asset account balances and complete the equation: Assets = Liabilities + Owner's Equity.

Transactions:

- a. Nori invested \$15,000 in his insurance business.
- b. Paid \$400 for office supplies.
- c. Purchased office equipment for \$2,000 on credit.
- d. Returned damaged supplies and received a refund of \$100.
- e. Issued a check for \$500 as a partial payment on the balance due for equipment.

EXERCISE 3-4

Accounting for assets, liabilities, and owner's equity.

Instructions:

1. Set up T accounts for Cash, Office Equipment, Delivery Equipment, Accounts Payable, and Erik Lier, Capital.
2. Analyze and record each of the following transactions in the T accounts. Identify each part of an entry by writing the letter of the transaction next to the amount.
3. Compute and enter the balance on the appropriate side of the account.
4. Total the asset account balances and complete the equation: Assets = Liabilities + Owner's Equity.

Transactions:

- a. Lier invested \$20,000 in his delivery business.
- b. Purchased file cabinets for \$400 on credit from the Gunn Equipment Company.
- c. Lier gave his \$15,000 truck to the business.
- d. Returned a damaged file cabinet and received credit for \$80 from Gunn Equipment Company.
- e. Issued a check for \$120 to the Gunn Equipment Company as a partial payment on the balance due for the file cabinets.

PROBLEMS

Complete all assigned problems on the forms provided in your workbook.

PROBLEM 3-1**Recording balances and transactions in T accounts.**

The following accounts and opening balances are for Clean Air Control Systems, a firm that tests air quality and develops antipollution systems.

Cash	\$45,000	Land	\$ 20,000
Office Equipment	10,000	Accounts Payable	18,000
Testing Equipment	13,000	Niccole Hank,	
Building	50,000	Capital	120,000

Instructions:

1. Record the opening balances in the T accounts provided in the workbook.
2. Analyze and record the following transactions in the accounts. Identify each part of an entry by writing the letter of the transaction next to the amount.
3. Foot the accounts and enter the balances.
4. Total the asset account balances. Then complete the equation: Assets = Liabilities + Owner's Equity.

Transactions:

- a. Paid \$26,000 to purchase more land.
- b. Paid \$18,000 for an addition to the building.
- c. Purchased testing equipment for \$4,000 on credit; payment is due in 60 days.
- d. Sold used office equipment and received \$2,000.
- e. Returned defective testing equipment and received credit for \$1,500.
- f. Hank invested an additional \$10,000 in the business.
- g. Paid \$5,000 to creditors on account.

PROBLEM 3-2**Recording balances and transactions in T accounts.**

The Anderson Garage provides parking facilities, towing, and repair services. Its accounts and opening balances are as follows:

Cash	\$20,000	Land	\$10,000
Office Equipment	5,000	Loans Payable	25,000
Towing Equipment	25,000	Accounts Payable	5,000
Building	30,000	Richard Anderson, Capital	60,000

Instructions:

1. Record the opening balances in the T accounts provided in the workbook.
2. Analyze and record the following transactions in the accounts. Identify each part of an entry by writing the letter of the transaction next to the amount.
3. Foot the accounts and enter the balances.
4. Total the asset account balances, and total the liability account balances. Then complete the equation: Assets = Liabilities + Owner's Equity.

Transactions:

- a. Anderson invested an additional \$10,000 in the business.
- b. Purchased office equipment for \$2,000 on credit.
- c. Borrowed an additional \$6,000 from the First Service Bank.
- d. Paid \$8,000 for a used tow truck.
- e. Returned damaged office equipment and received credit for \$500.
- f. Paid \$4,000 for a vacant lot.
- g. Paid the balance of \$1,500 due on the office equipment.
- h. Paid \$4,000 for an addition to the building.

CASE STUDY

Write the answer to the case study on the form provided in your workbook.

When Tom Stern began his investment management consulting business, he prepared his financial records using the following accounts:

Cash
Accounts Receivable
Office Equipment
Communication Equipment

Accounts Payable

Tom Stern, Capital

He figured that since he was using only six accounts, he didn't have to worry about debits or credits. Since he was just starting, he thought there was no need for having account balances on the left or right.

Critical Thinking

- *Is Stern's assessment correct? Is there a need for keeping balances on the debit or credit side? Why?*