



**21-1**

# Computing the Total Assets, Liabilities, and Owner's Equity

**Assets** are the total of your cash, the items that you have purchased, and any money that your customers owe you. **Liabilities** are the total amount of money that you owe to creditors. **Owner's equity, net worth, or capital** is the total value of assets that you own minus your total liabilities. To put it another way, owner's equity plus liabilities equal assets. Accounts representing these three items will make up your company's financial statements.

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

**Owner's Equity = Assets - Liabilities**

**Liabilities = Assets - Owner's Equity**

**Example**

**Find the assets, liabilities, and owner's equity.**

Kevin Crawford and Crystal Alesio started Customized Websites, a Web design firm. They each contributed \$10,000 of their own money and borrowed \$50,000 from the bank to pay for computers and the necessary peripherals. Computers cost them \$5,000, while printers, scanners, and software cost them \$27,500. Office furniture cost them an additional \$7,500, which they have not yet paid. What are their assets, liabilities, and owner's equity?

1. Find the assets.  
Cash (2 × \$10,000) + Bank Loan (\$50,000 - \$5,000 - \$27,500) + Computers (\$5,000) + Computer Peripherals (\$27,500) + Office Furniture (\$7,500) = **\$77,500 assets**
2. Find the liabilities.  
Bank Loan (\$50,000) + Unpaid Office Furniture (\$7,500) = **\$57,500 liabilities**
3. Find the Owner's Equity.  
\$77,500 - \$57,500 = **\$20,000 owner's equity**

**Practice**

**Find the liabilities, assets, or owner's equity in the table below.**

	<b>Liabilities</b>	<b>Assets</b>	<b>Owner's Equity</b>
1.	\$ 45,000		\$25,000
2.		\$100,000	24,750
3.	57,827	75,000	
4.	343,327		4,273

5. **Standardized Test Practice** Dr. Doug Moore and Dr. Kim Peters started Valley Dental. They each contributed \$7,500 of their own money and borrowed \$100,000 for equipment and supplies. Dental equipment cost them \$81,000 and supplies amounted to \$3,467, which they have not yet paid. What are their liabilities?  
**A. \$118,467    B. \$103,467    C. \$100,000    D. \$15,000**

21-2

# Calculating a Balance Sheet

A **balance sheet** shows the financial position of your company on a certain date. You may prepare your balance sheet monthly, quarterly, or annually. The balance sheet shows your total assets, total liabilities, and owner's equity. The balance sheet is designed so that the assets appear on the left, while the liabilities and owner's equity appear on the right. As you'll recall from the previous section, the sum of the assets must equal the sum of the liabilities and owner's equity.

**Example**

**Prepare a balance sheet.**

To start Customized Websites, Kevin Crawford and Crystal Alesio each contributed \$10,000 of their own money and borrowed \$50,000 from the bank to pay for computers and the necessary peripherals. Computers cost them \$5,000, while printers, scanners, and software cost them \$27,500. Office furniture cost them an additional \$7,500, which they have not yet paid. They are left with \$37,500 in cash. Prepare a balance sheet for Customized Websites.

Customized Websites Balance Sheet Jan 31, 20—			
<u>Assets</u>		<u>Liabilities</u>	
Cash	\$ 37,500	Bank Loan	\$50,000
Computers	5,000	Furniture Payable	<u>7,500</u>
Comp. Peripherals	27,500	Total Liabilities	\$57,500
Office Furniture	<u>7,500</u>	<u>Owner's Equity</u>	
		Capital	<u>20,000</u>
Total Assets	<u>\$77,500</u>	Total Liabilities and Owner's Equity	<u>\$77,500</u>

**Practice**

**Find the total assets, total liabilities, and owner's equity.**

	<b>Cash</b>	<b>Inventory</b>	<b>Supplies</b>	<b>Total Assets</b>	<b>Bank Loan</b>	<b>Wages Owed</b>	<b>Total Liabilities</b>	<b>Owner's Equity</b>
1.	\$25,000	\$ 17,500	\$2,150	a.	\$ 7,500	\$15,500	b.	c.
2.	50,750	127,000	5,936	a.	100,000	42,385	b.	c.
3.	62,375	38,624	491	a.	0.00	27,247	b.	c.
4.	35,000	132,585	9,462	a.	150,000	0.00	b.	c.

5. **Standardized Test Practice** To start Valley Dental, Dr. Moore and Dr. Peters each contributed \$7,500 of their own money and borrowed \$100,000 for equipment and supplies. Dental equipment cost them \$81,000 and supplies amounted to \$3,467. They also have unpaid taxes of \$5,500. What is the total amount of their assets on their balance sheet?

- A. \$120,500    B. \$115,000    C. \$105,500    D. \$113,000

# 21-3 Determining the Cost of Goods Sold

Besides your balance sheet items, you'll also need to know whether your company is operating at a profit or loss. To determine whether you are making money or losing money, you must know your sales figures, your expenses, and your **cost of goods sold**. Your cost of goods sold is equal to the value of the beginning inventory plus the cost of any goods received (receipts) minus the value of the ending inventory.

### Example

**Find the cost of goods sold.**

Customized Computers began the month with an inventory valued at \$137,250. During the month the company received 50 monitors that cost \$75 each, 30 printers that cost \$99 each, and 40 CPU's that cost \$450 each. The inventory at the end of the month was valued at \$119,385. What was the cost of goods sold?

- Find the receipts.  
 $(50 \times \$75) + (30 \times \$99) + (40 \times \$450) = \$24,720$

- Find the cost of goods sold.  
**Cost of Goods Sold = (Beginning Inventory + Receipts) – Ending Inventory**  
 $(\$137,250 + \$24,720) - \$119,385 = \$42,585$

### Practice

**Find the cost of goods sold.**

	<b>Beginning Inventory</b>	<b>Receipts</b>	<b>Ending Inventory</b>	<b>Cost of Goods Sold</b>
1.	\$100,000	\$ 25,000	\$ 95,000	
2.	58,500	21,250	37,975	
3.	87,791	26,342	38,427	
4.	257,386	122,518	174,352	

- At the beginning of the quarter, O'Reilly Associates had an inventory valued at \$274,184. During the quarter it received three shipments of merchandise valued at \$137,316, \$89,622, and \$36,431. The value of the inventory at the end of the quarter was \$179,034. What was O'Reilly Associates' cost of goods sold?
- Standardized Test Practice** Summer Sensation's inventory on July 1 is valued at \$67,295. Throughout the quarter it received 125 bathing suits at a cost of \$22.50 each, 250 pairs of shorts at a cost of \$7.50 each, and 200 tank tops priced at \$3.25 each. The value of the inventory on September 30 is \$31,429. What is Summer Sensation's cost of goods sold for the quarter?  
**A.** \$5,337.50    **B.** \$72,632.50    **C.** \$30,528.50    **D.** \$41,203.50

21-4

# Completing an Income Statement

Your **income statement**, or **profit-and-loss statement**, shows your income and operating expenses in detail. If your gross profit is greater than your total operating expenses, your income statement will show a **net income**, or **net profit**. If your company has total operating expenses that are greater than your company's gross profit, your company's income statement will show a **net loss**.

**Example**

**Find the net income.**

Customized Computers' cost of goods sold for the month of January was \$42,585. Sales for the month totaled \$75,389, of which \$627 was returned. Accounting records show that Customized Computers' operating expenses totaled \$16,328. What is its net income for January?

1. Find the gross profit.

**Gross Profit = Net Sales – Cost of Goods Sold**

$(\$75,389 - \$627) - \$42,585 = \$32,177$  gross profit

2. Find the net income.

**Net Income = Gross Profit – Total Operating Expenses**

$\$32,177 - \$16,328 = \$15,849$  net income

**Practice**

**Find the net sales, the gross profit, and the net income.**

	<b>Total Sales</b>	<b>Returns</b>	<b>Net Sales</b>	<b>Cost of Goods Sold</b>	<b>Gross Profit</b>	<b>Operating Expenses</b>	<b>Net Income</b>
1.	\$ 15,375	\$ 395	a.	\$ 9,000	b.	\$ 3,250	c.
2.	47,267	2,653	a.	24,156	b.	13,268	c.
3.	99,514	7,103	a.	51,398	b.	22,261	c.
4.	318,516	0	a.	197,234	b.	86,572	c.

5. **Standardized Test Practice** Summer Sensation's sales for the third quarter were \$192,428, of which \$2,327 was returned. Its cost of goods sold was \$41,203. Its operating expenses for the quarter were \$75,379. What is Summer Sensation's net income?

- A. \$190,101    B. \$73,519    C. It has a net loss.    D. \$148,898



21-5

# Analyzing Balance Sheets and Income Statements

Your business might analyze its income statement by finding what percentage any given item is of the net sales. Your business might also analyze its balance sheet by finding certain defined ratios. The current ratio is the ratio of total assets to total liabilities. The quick ratio, sometimes called the acid-test ratio, is the ratio of total assets minus inventory to total liabilities.

**Percentage of Net Sales = Amount for Item ÷ Net Sales**

**Current Ratio = Total Assets ÷ Total Liabilities**

**Quick Ratio = (Total Assets – Inventory) ÷ Total Liabilities**

**Example**

**Find the percentage of net sales.**

Customized Computers’ net sales for January amounted to \$74,762. According to its income statement, its cost of goods sold amounted to \$42,585. What is the cost of goods sold as a percentage of net sales, rounded to the nearest hundredth percent?

Find the percentage of net sales.

**Percentage of Net Sales = Amount for Item ÷ Net Sales**

$\$42,585 \div \$74,762 = 56.96\%$  of net sales

**Practice**

**Find the percentage of net sales, rounded to the nearest hundredth percent.**

	<b>Amount for Item</b>	<b>Net Sales</b>	<b>% of Net Sales</b>
1. Gross profit	\$55,000	\$250,000	
2. Operating expenses	18,750	55,000	

**Find the current ratio and the quick ratio, rounded to the nearest tenth.**

	<b>Total Assets</b>	<b>Inventory</b>	<b>Liabilities</b>	<b>Current Ratio</b>	<b>Quick Ratio</b>
3.	\$125,000	\$ 32,000	\$ 50,000	a.	b.
4.	287,960	116,327	137,233	a.	b.

5. **Standardized Test Practice** Summer Sensation’s sales for the third quarter totaled \$192,428, of which \$2,327 was returned. Its cost of goods sold totaled \$41,203. What is its cost of goods sold as a percentage of its net sales?

- A. 21.4%    B. 4.7:1    C. 21.7%    D. 4.6:1

21-6

# Comparing Income Statements Using Horizontal Analysis

When you perform a **horizontal analysis**, you compare two or more of your income statements for different periods. This is done by computing percentage changes from one income statement to another. When computing percentage change, the dollar amount on the earlier statement is the **base figure**. The **amount of change** is the difference between the base figure and the corresponding figure on the current statement. If an amount decreased from one income statement to the next, the change will be expressed as a negative number.

**Example**

**Find the percentage change.**

Customized Computers' net sales for January were \$74,762 and its cost of goods sold amounted to \$42,585. Its net sales for February are \$81,334 and its cost of goods sold came to \$40,972. To the nearest hundredth percent, what is the percent change for net sales and cost of goods sold?

Find the percentage change.

**Percentage Change = Amount of Change ÷ Base Figure**

$$(\$81,334 - \$74,762) \div \$74,762 = 8.80\% \text{ change in net sales}$$

$$(\$40,972 - \$42,585) \div \$42,585 = -3.79\% \text{ change in cost of goods sold}$$

**Practice**

**Find the percentage change, rounded the nearest hundredth percent.**

	<b>Last Year (Base)</b>	<b>This Year</b>	<b>% Change</b>
1.	\$650,000	\$700,000	
2.	59,000	52,500	
3.	136,275	142,357	

Income statements for O'Reilly Associates showed these figures for July and August. Find the amount of change and the percentage change.

	<b>July</b>	<b>August</b>	<b>Amount of Change</b>	<b>% Change</b>
4. Net sales	\$205,255	\$200,398	a.	b.
5. Cost of goods sold	138,357	142,792	a.	b.
6. Gross profit on sales	66,898	57,606	a.	b.
7. Operating expenses	36,326	41,285	a.	b.
8. Net income	30,572	16,321	a.	b.

9. **Standardized Test Practice** Summer Sensation's sales for the third quarter totaled \$192,428, of which \$2,327 was returned. Its net sales for the fourth quarter totaled \$191,397. What is the percent change of net sales?

- A. -0.54%    B. 0.68%    C. 0.54%    D. -0.68%

## 21 Chapter Review—Answers

### *Preparing Your Financial Statements*

In this review, you will prepare a year-end balance sheet and income statement for Your New Business. You will then use the information in those financial statements to answer some important questions about your company.

1. Your New Business had the following assets and liabilities at the end of the year:

Cash: \$37,250	Supplies: \$5,000	Unpaid Merchandise: \$7,500
Inventory: \$22,375	Bank Loan: \$25,000	Taxes Owed: \$3,475
Land: \$15,000	Building: \$150,000	Real Estate Loan: \$175,000

Prepare a balance sheet for Your New Business.

2. At the beginning of the year you started your business with \$500 worth of inventory. Throughout the year you received four merchandise shipments in the amounts of \$15,000, \$27,500, \$36,250, and \$18,750. Your year-end inventory was \$10,000. What was your cost of goods sold?
3. Using the information given in Problem 2 and the following, prepare a year-end income statement for Your New Business:  
Sales: \$150,000; Returned Merchandise: \$1,500; Operating Expenses: \$35,000.
4. What percentage of net sales was your cost of goods sold?
5. What is your current ratio?
6. What is your quick ratio?
7. If you estimate your net income for next year to be \$30,000, what will the percent change for net income be?