# Solving Linear Equations



**3.1** Solve One-Step Equations

3.2 Solve Two-Step Equations

3.3 Solve Multi-Step Equations

3.4 Solve Equations with Variables on Both Sides

3.5 Write Ratios and Proportions

**3.6** Solve Proportions Using Cross Products

3.7 Solve Percent Problems

3.8 Rewrite Equations and Formulas

## Before

In previous courses and chapters, you learned the following skills, which you'll use in Chapter 3: simplifying expressions, writing percents as decimals, and using formulas.

# **Prerequisite Skills**

## **VOCABULARY CHECK**

#### Copy and complete the statement.

- **1.** In the expression 3x + 7 + 7x, <u>?</u> and <u>?</u> are like terms.
- **2.** The reciprocal of  $\frac{5}{8}$  is  $\underline{?}$ .

### **SKILLS CHECK**

#### Simplify the expression. (Review p. 96 for 3.2–3.6.)

**3.** 5x - (6 - x) **4.** 3(x - 9) - 16 **5.** 23 + 4(x + 2) **6.**  $x(7 + x) + 9x^2$ 

#### Write the percent as a decimal. (Review p. 916 for 3.7.)

8. 99%

**7.** 54%

**9.** 12.5% **10.** 150%

Find the perimeter of the rectangle. (Review p. 924 for 3.8.)

