# CHAPTER

## Study Guide

#### **PREVIEW**

## What's the chapter about?

Chapter 1 is about **expressions**, **equations**, **and inequalities**. In Chapter 1 you'll learn

- how to evaluate and simplify numerical and algebraic expressions.
- how to solve linear and absolute value equations and inequalities.
- how to use algebra to model and solve real-life problems.

### **KEY VOCABULARY**

- graph of a real number, p. 3
- numerical expression, p. 11
- order of operations, p. 11
- variable, p. 12
- algebraic expression, p. 12
- mathematical model, p. 12
- terms of an expression, p. 13
- linear equation in one variable, p. 19
- verbal model, p. 33
- algebraic model, p. 33
- · linear inequality in one variable, p. 41
- · compound inequality, p. 43
- absolute value, p. 50

#### **PREPARE**

Study Tip

STUDENT HELP

"Student Help" boxes throughout the chapter

give you study tips and tell vou where to look for

extra help in this book and on the Internet.

## Are you ready for the chapter?

**SKILL REVIEW** Do these exercises to review key skills that you'll apply in this chapter. See the given **reference page** if there is something you don't understand.

Perform the operation. (Skills Review, p. 905)

**1.** 
$$-3 + 14$$
 **2.**  $7(-10)$ 

$$2.7(-10)$$

**3.** 
$$-1 - (-9)$$
 **4.**  $-45 \div (-5)$ 

**7** 
$$30 \div (-3)$$

**7.** 
$$30 \div (-3)$$
 **8.**  $-6 + (-2)$ 

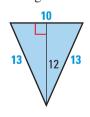
Find the area of the figure. (Skills Review, p. 914)

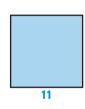
9. triangle

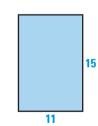
10. square

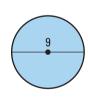
**11**. rectangle

12. circle









Here's a study strategy!

## Vocabulary File

Make a flashcard file of vocabulary words.

On the front of an index card, write an important vocabulary word or phrase. On the back of the card write the definition given in the book, along with your own definition if that helps you. Also include symbols, diagrams, examples, and your own notes.