# CHAPTER

# Study Guide

#### **PREVIEW**

### What's the chapter about?

Chapter 1 is an **introduction to algebra**. In Chapter 1 you'll learn to

- write and evaluate expressions.
- check solutions to equations and inequalities and use mental math.
- use verbal and algebraic models to represent real-life situations.
- organize data and represent functions.

#### **KEY VOCABULARY**

- New
- variable expression, p. 3
- unit analysis, p. 5
- verbal model, p. 5
- power, p. 9

- exponent, p. 9
- · base of a power, p. 9
- · order of operations, p. 16
- equation, p. 24
- solution of an equation, p. 24
- inequality, p. 26
- function, p. 46
- input-output table, p. 46
- domain, p. 47
- range, p. 47

#### **PREPARE**

Study Tip "Student Help" boxes

STUDENT HELP

throughout the chapter give you study tips and

tell you 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.

Write the percent as a decimal and as a fraction or a mixed number in lowest terms. (Skills Review, pp. 784-785)

- **1.** 60%
- **2.** 33%
- **3.** 0.08%
- **4.** 150%

Complete the statement using > or <. (Skills Review, pp. 779–780)

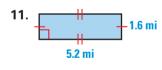
- **5.** 899 ? 901
- **6.** 64.1 <u>?</u> 64.03
- **7.** 2050 <u>?</u> 2005
- **8.** 0.099 <u>?</u> 0.01

Find the area and perimeter of the figure. (Skills Review, pp. 790-791)



3.5 cm

10.



# STRATEGY

### Here's a study strategy!

# Keeping a Math Notebook

- Keep a notebook of math notes about each chapter, separate from your homework exercises. This will help you remember new concepts and skills.
- Review your notes each day before you start your next homework assignment.