

# CHAPTER 2

## Study Guide

### PREVIEW

### What's the chapter about?

Chapter 2 is about **real numbers**. In Chapter 2 you'll learn

- how to add, subtract, multiply, and divide real numbers.
- how to determine the likelihood of an event using probability and odds.

### KEY VOCABULARY

#### ► Review

- variable, p. 3
- order of operations, p. 16
- data, p. 40
- function, p. 46

#### ► New

- real numbers, p. 63
- integers, p. 63
- absolute value, p. 65
- counterexample, p. 66
- matrix, p. 86
- distributive property, p. 100
- reciprocal, p. 108
- probability of an event, p. 114

### PREPARE

### 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.

**Put the numbers in order from least to greatest.** (Skills Review, pp. 779–780)

1. 4.6, 6.1, 5.5, 5.06, 4.07, 5.46
2.  $2\frac{5}{6}$ ,  $2\frac{2}{3}$ ,  $\frac{11}{4}$ ,  $2\frac{5}{8}$ ,  $\frac{25}{11}$ ,  $2\frac{3}{5}$

**Find the value of the expression. Write the answer as a fraction or mixed number in lowest terms.** (Skills Review, pp. 781–782)

3.  $\frac{9}{14} - \frac{3}{7}$
4.  $\frac{5}{6} + \frac{2}{3}$
5.  $1\frac{3}{4} + 2\frac{1}{8}$
6.  $8\frac{7}{15} - 2\frac{4}{5}$
7.  $\frac{5}{9} \div \frac{2}{9}$
8.  $\frac{7}{9} \cdot \frac{3}{14}$
9.  $6\frac{6}{7} \cdot 4\frac{1}{12}$
10.  $9\frac{1}{6} \div 1\frac{3}{8}$

**Evaluate the expression.** (Review Example 2, p. 17)

11.  $4 + 7 - 3 \cdot 2$
12.  $64 \div 16 + 5 - 7$
13.  $9 - 8 \div 4 + 12$
14.  $16 - 9 \cdot 5 \div 3$
15.  $8 \cdot 3 - 6 \cdot 4$
16.  $12.8 - 7.5 \div 1.5 + 3.2$

### Here's a study strategy!

### STUDY STRATEGY

#### Studying a Lesson

- Read the goals and study tips.
- Review the examples and highlighted vocabulary.
- Be sure you understand the rules and properties given in boxes.
- Take notes. Add to your list of vocabulary, rules, and properties in your notebook.