

Study Guide

PREVIEW

What's the chapter about?

Chapter 1 is about the **basic elements of geometry**. In Chapter 1, you'll learn

- how to measure segments and angles.
- how to divide a segment or angle into two equal parts.
- relationships among special pairs of angles.

KEY VOCABULARY

► **New**

- | | | |
|------------------------------|------------------------------|-------------------------------|
| • conjecture, p. 4 | • congruent segments, p. 19 | • straight angle, p. 28 |
| • point, line, plane, p. 10 | • congruent angles, p. 26 | • segment bisector, p. 34 |
| • segment, ray, p. 11 | • measure of an angle, p. 27 | • angle bisector, p. 36 |
| • postulate, p. 17 | • acute angle, p. 28 | • vertical angles, p. 44 |
| • length of a segment, p. 17 | • right angle, p. 28 | • complementary angles, p. 46 |
| | • obtuse angle, p. 28 | • supplementary angles, p. 46 |

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.

Subtract the integers. (Skills Review, p. 785)

- | | | | |
|-------------|----------------|----------------|----------------|
| 1. $17 - 9$ | 2. $9 - 17$ | 3. $5 - (-3)$ | 4. $3 - (-5)$ |
| 5. $-7 - 2$ | 6. $-7 - (-2)$ | 7. $-6 - (-5)$ | 8. $-5 - (-6)$ |

Evaluate the sum. (Skills Review, p. 786)

- | | | | |
|----------------|--------------------|--------------------|--------------------|
| 9. $2^2 + 4^2$ | 10. $5^2 + (-2)^2$ | 11. $(-1)^2 + 1^2$ | 12. $(-5)^2 + 0^2$ |
|----------------|--------------------|--------------------|--------------------|

Evaluate the radical expression. Round your answer to two decimal places.

(Skills Review, p. 799)

- | | | | |
|---------------------|---------------------|------------------------|--------------------|
| 13. $\sqrt{36 + 4}$ | 14. $\sqrt{1 + 49}$ | 15. $\sqrt{225 + 100}$ | 16. $\sqrt{9 + 9}$ |
|---------------------|---------------------|------------------------|--------------------|

STUDENT HELP

► **Study Tip**

"Student Help" boxes throughout the chapter give you study tips and tell you where to look for extra help in this book and on the Internet.

STUDY STRATEGY

Here's a study strategy!

Learning Vocabulary

Important words in this book are in bold type and are highlighted in yellow.

- Keep a section in your notebook for writing down definitions of new words.
- Draw and label sketches near your definitions, if this helps you.
- Use your vocabulary pages to review for quizzes and tests.