Study Guide

What's the chapter about?

Chapter 2 is about **reasoning** and developing **proof**. Reasoning and proof are important tools used in geometry. In Chapter 2, you'll learn how to

- write a two-column proof and a paragraph proof.
- prove segment and angle relationships.

KEY VOCABULARY

▶ **Review**
- conjecture, p. 4
- inductive reasoning, p. 4
- counterexample, p. 4
- definition, p. 10
- postulates, p. 17

- vertical angles, p. 44
- linear pair, p. 44
▶ **New**
- if-then form, p. 71
- converse, p. 72
- inverse, p. 72

- contrapositive, p. 72
- biconditional statement, p. 80
- theorem, p. 102
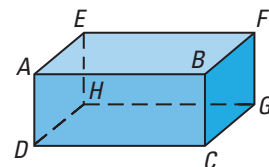- two-column proof, p. 102
- paragraph proof, p. 102

Are you ready for the chapter?

SKILL REVIEW Do these exercises to review skills that you'll apply in this chapter. See the given **reference page** if there is something you don't understand.
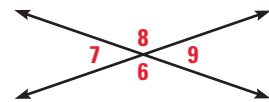
Use the diagram below to name the point. (Review Example 1, p. 10)

1. A fourth point coplanar with points A, B, and C

2. A fourth point coplanar with points A, E, and F

3. A fourth point coplanar with points B, C, and G

4. A fourth point coplanar with points D, C, and F

Find the measure of the angle, given that $m\angle 7 = 38°$. (Review Example 2, p. 45)

5. $m\angle 6$ 6. $m\angle 8$ 7. $m\angle 9$

Here's a study strategy!

Previewing Lessons

Preview each lesson of the chapter. Knowing what you are about to learn can help you make the mental connections to what you already know. When previewing a lesson, look for the following:

- terms defined in a previous lesson
- properties that have been introduced in a previous lesson