



For a complete list of the postulates and theorems in this chapter, see p. PS12.

## Vocabulary

alternate exterior angles . . . . . 147	parallel planes . . . . . 146	same-side interior angles . . . . . 147
alternate interior angles . . . . . 147	perpendicular bisector . . . . . 172	skew lines . . . . . 146
corresponding angles . . . . . 147	perpendicular lines . . . . . 146	slope . . . . . 182
distance from a point to a line . . . . . 172	point-slope form . . . . . 190	slope-intercept form . . . . . 190
parallel lines . . . . . 146	rise . . . . . 182	transversal . . . . . 147
	run . . . . . 182	

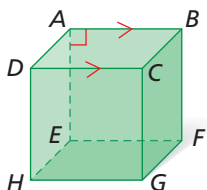
Complete the sentences below with vocabulary words from the list above.

- Angles on opposite sides of a transversal and between the lines it intersects are     ? .
- Lines that are in different planes are     ? .
- A(n)     ? is a line that intersects two coplanar lines at two points.
- The     ? is used to write the equation of a line with a given slope that passes through a given point.
- The slope of a line is the ratio of the     ? to the     ? .

## 3-1 Lines and Angles (pp. 146–151)

### EXAMPLES

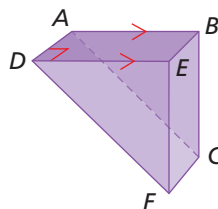
Identify each of the following.



- a pair of parallel segments  
 $\overline{AB} \parallel \overline{CD}$
- a pair of parallel planes  
plane  $ABC \parallel$  plane  $EFG$
- a pair of perpendicular segments  
 $\overline{AB} \perp \overline{AE}$
- a pair of skew segments  
 $\overline{AB}$  and  $\overline{FG}$  are skew.

### EXERCISES

Identify each of the following.



- a pair of skew segments
- a pair of parallel segments
- a pair of perpendicular segments
- a pair of parallel planes