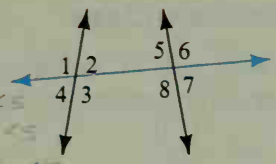
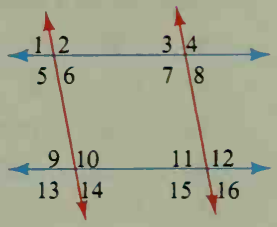
Classroom Exercises



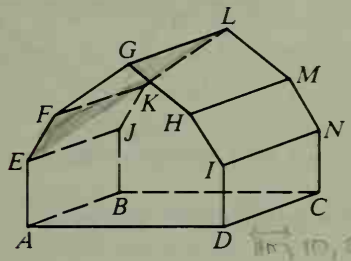
1. The blue line is a transversal.
   - **a.** Name four pairs of corresponding angles.
   - **b.** Name two pairs of alternate interior angles.
   - **c.** Name two pairs of same-side interior angles.
   - **d.** Name two pairs of angles that could be called *alternate exterior angles*.
   - **e.** Name two pairs of angles that could be called *same-side exterior angles*.

Classify each pair of angles as alternate interior angles, same-side interior angles, corresponding angles, or none of these.



2. $\angle 7$ and $\angle 11$
3. $\angle 14$ and $\angle 16$
4. $\angle 4$ and $\angle 10$
5. $\angle 3$ and $\angle 6$
6. $\angle 6$ and $\angle 11$
7. $\angle 2$ and $\angle 10$
8. $\angle 2$ and $\angle 3$
9. $\angle 7$ and $\angle 12$

10. Classify each pair of lines as intersecting, parallel, or skew.
    - **a.** $\overleftrightarrow{AB}$ and $\overleftrightarrow{EJ}$
    - **b.** $\overleftrightarrow{AB}$ and $\overleftrightarrow{FK}$
    - **c.** $\overleftrightarrow{AB}$ and $\overleftrightarrow{ID}$
    - **d.** $\overleftrightarrow{EF}$ and $\overleftrightarrow{IH}$
    - **e.** $\overleftrightarrow{EF}$ and $\overleftrightarrow{NM}$
    - **f.** $\overleftrightarrow{CN}$ and $\overleftrightarrow{FG}$



11. Name six lines parallel to $\overleftrightarrow{GL}$.
12. Name several lines skew to $\overleftrightarrow{GL}$.
13. Name five lines parallel to plane $ABCD$.
14. Name two coplanar segments that do not intersect and yet are not parallel.

Complete each statement with the word *always*, *sometimes*, or *never*.

15. Two skew lines are ___?___ parallel.
16. Two parallel lines are ___?___ coplanar.
17. A line in the plane of the ceiling and a line in the plane of the floor are ___?___ parallel.
18. Two lines in the plane of the floor are ___?___ skew.
19. A line in the plane of a wall and a line in the plane of the floor are
    - **a.** ___?___ parallel.
    - **b.** ___?___ intersecting.
    - **c.** ___?___ skew.