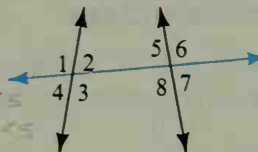


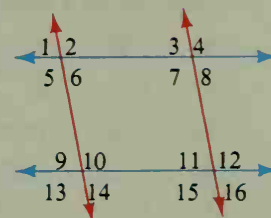
Classroom Exercises

1. The blue line is a transversal.
 - a. Name four pairs of corresponding angles. $\angle 1 \angle 5, \angle 2 \angle 6, \angle 3 \angle 7, \angle 4 \angle 8$
 - b. Name two pairs of alternate interior angles. $\angle 3 \angle 5, \angle 4 \angle 6$
 - c. Name two pairs of same-side interior angles. $\angle 3 \angle 7, \angle 4 \angle 8$
 - d. Name two pairs of angles that could be called *alternate exterior angles*. $\angle 1 \angle 7, \angle 2 \angle 8$
 - e. Name two pairs of angles that could be called *same-side exterior angles*. $\angle 1 \angle 8, \angle 2 \angle 7$

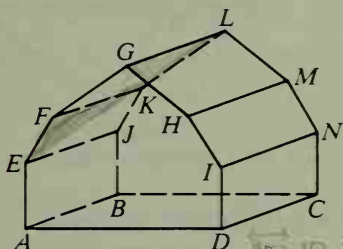


Classify each pair of angles as alternate interior angles, same-side interior angles, corresponding angles, or none of these.

2. $\angle 7$ and $\angle 11$ *same-side*
3. $\angle 14$ and $\angle 16$ *corresponding*
4. $\angle 4$ and $\angle 10$
5. $\angle 3$ and $\angle 6$ *alternate*
6. $\angle 6$ and $\angle 11$
7. $\angle 2$ and $\angle 10$ *corresponding*
8. $\angle 2$ and $\angle 3$ *same-side*
9. $\angle 7$ and $\angle 12$ *alternate*



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} . *AB, DC, AE, EJ, FK*
12. Name several lines skew to \overleftrightarrow{GL} .
13. Name five lines parallel to plane $ABCD$. *EF, HG, GL, FK, E*
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. *never*
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.