

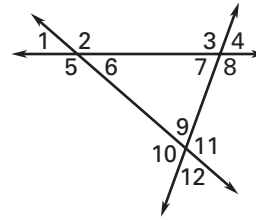
Challenge: Skills and Applications

For use with pages 129–134

In Exercises 1–3, suppose point A is on line j and point B is on line k .

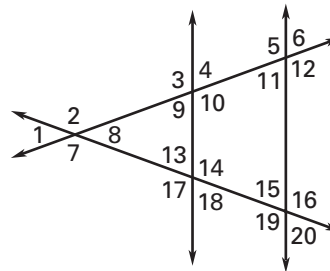
1. If $j \parallel k$, is \overleftrightarrow{AB} a transversal for lines j and k ? Explain.
2. If j intersects k (but not at A or B) is \overleftrightarrow{AB} a transversal for lines j and k ? Explain.
3. If j and k are skew lines, is \overleftrightarrow{AB} a transversal for lines j and k ? Explain.

In Exercises 4–8, refer to the diagram.



4. True or false: Each of the three lines is a transversal for the other two.
5. Name all pairs of corresponding angles.
6. Name all pairs of alternate exterior angles.
7. Name all pairs of alternate interior angles.
8. Name all pairs of consecutive interior angles.

In Exercises 9–16, complete the statement.
List all possible correct answers.



9. $\angle 1$ and _____ are corresponding angles.
10. $\angle 10$ and _____ are corresponding angles.
11. $\angle 1$ and _____ are alternate exterior angles.
12. $\angle 4$ and _____ are alternate exterior angles.
13. $\angle 11$ and _____ are alternate interior angles.
14. $\angle 14$ and _____ are alternate interior angles.
15. $\angle 8$ and _____ are consecutive interior angles.
16. $\angle 14$ and _____ are consecutive interior angles.