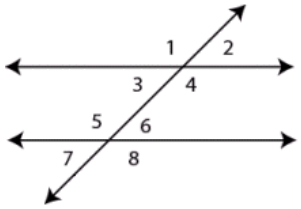
Name: _____ Date: _____

Lines and Transversals

- Two lines are _____ if they are coplanar and do not intersect.
- Lines that do not intersect and are not coplanar are called _____.
- _____ are two lines that intersect at a right angle.
- A _____ is a line that intersects two or more coplanar lines at different points.

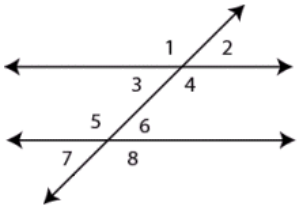
Corresponding Angles Postulate:

- If two parallel lines are cut by a transversal, then the pairs of corresponding angles are congruent.



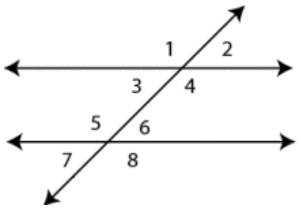
Alternate Interior Angles Theorem:

- If two parallel lines are cut by a transversal, then the pairs of alternate interior angles are congruent.



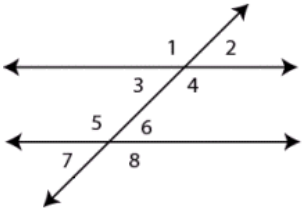
Alternate Exterior Angles Theorem:

- If two parallel lines are cut by a transversal, then the pairs of alternate exterior angles are congruent.



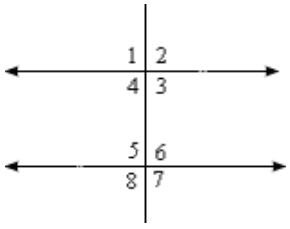
Consecutive Interior Angles Theorem:
(Same Side Interior Angles)

- If two parallel lines are cut by a transversal, then the pairs of consecutive interior angles are supplementary.

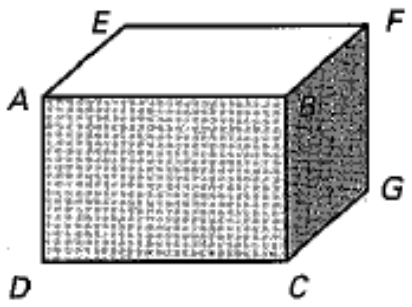


Perpendicular Transversal Theorem:

- If a transversal is perpendicular to one of the two parallel lines, then it is perpendicular to the other.

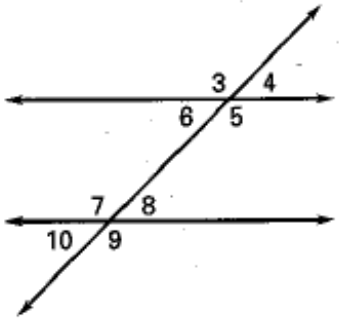


Think of each segment in the diagram as part of a line. Identify the segments as parallel, skew, or perpendicular.



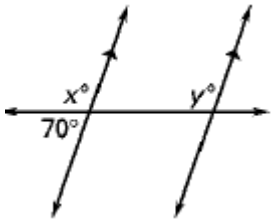
1. AB and DC
2. AB and BC
3. BF and FG
4. AB and FG

Identify the angles as corresponding, alternate interior, alternate exterior, or consecutive interior.

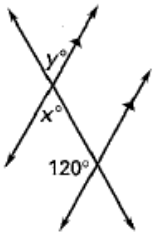


5. ∠3 and ∠7
6. ∠4 and ∠10
7. ∠5 and ∠8
8. ∠8 and ∠6
9. ∠9 and ∠5
10. ∠5 and ∠7

11.



12.



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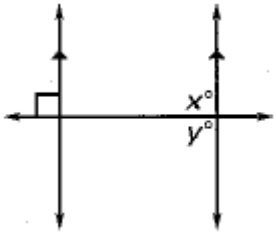

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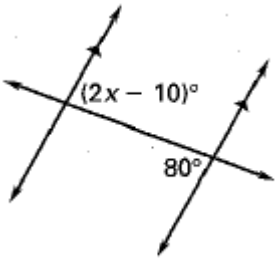
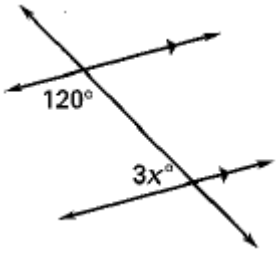


15.



16.