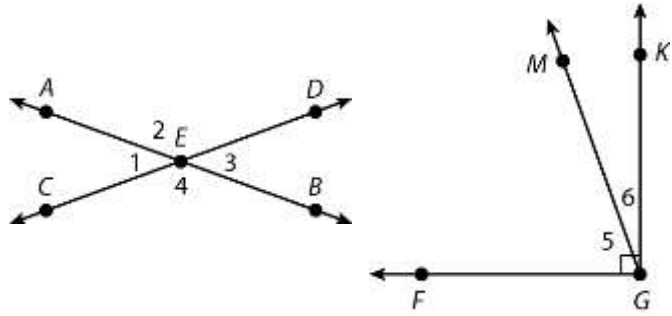


Parallel Lines II

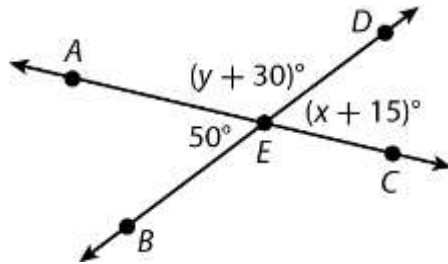
Terms:
 linear pair
 supplementary angles
 complementary angles
 vertical angles



- $\angle 5$ and $\angle 6$ are _____ and adjacent angles.
- $\angle 1$ and $\angle 3$ are _____.
- $\angle 1$ and $\angle 2$ are _____ and _____.
- If $\angle 2$ is 140° , then the measure of $\angle 1$ is _____ and the measure of $\angle 4$ is _____.

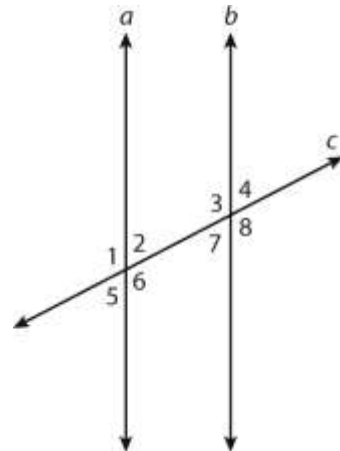
Use the figures for Problems 5-8

- supplement of $\angle AEB$ _____
- complement of $\angle AEB$ _____
- $x =$ _____
- $y =$ _____

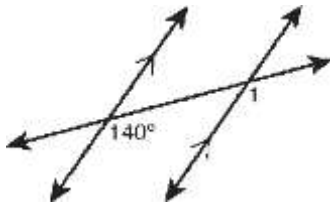


Directions: *a* and *b* are parallel lines, and *c* is a transversal.

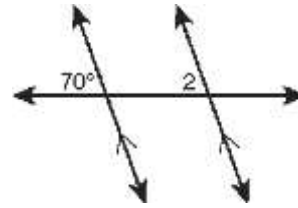
- Name a pair of alternate interior angles.
- Name a pair of same side interior angles.
- Name a pair of corresponding angles.
- Name a pair of alternate exterior angles.



Find each angle measure.



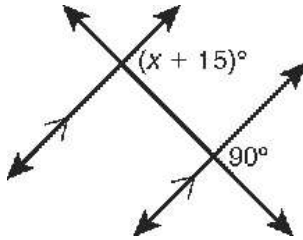
13. $m\angle 1$ _____



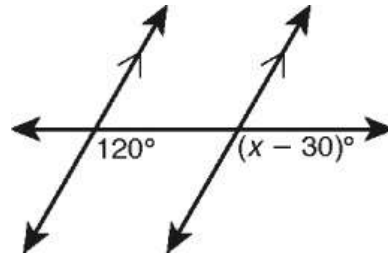
14. $m\angle 2$ _____

Find x .

15.



16.



Use the figure below for Problems 17-20. Tell whether lines m and n must be parallel from the given information. If they are, state your reasoning (use a converse).

17. $\angle 7 \cong \angle 3$

18. $m\angle 2 = (5x + 3)^\circ$, $m\angle 3 = (8x - 5)^\circ$, $x = 14$

19. $\angle 7 \cong \angle 6$

20. $\angle 3 \cong \angle 5$

