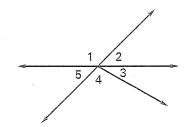
Practice B

For use with pages 44-50

Use the figure at the right.

- 1. Are $\angle 1$ and $\angle 2$ a linear pair?
- **2.** Are $\angle 4$ and $\angle 5$ a linear pair?
- **3.** Are $\angle 3$ and $\angle 1$ vertical angles?
- **4.** Are $\angle 2$ and $\angle 5$ vertical angles?



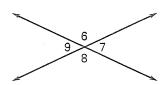
Use the figure at the right.

5. If
$$m \angle 6 = 51^{\circ}$$
, then $m \angle 7 = \underline{?}$.

6. If
$$m \angle 8 = 103^{\circ}$$
, then $m \angle 6 = ?$.

7. If
$$m \angle 9 = 136^{\circ}$$
, then $m \angle 8 = _?$.

8. If
$$m \angle 7 = 53^{\circ}$$
, then $m \angle 9 = ?$.



In Exercises 9–12, assume $\angle A$ and $\angle B$ are complementary and $\angle B$ and $\angle C$ are supplementary.

9. If
$$m \angle A = 48^\circ$$
, then $m \angle B = \underline{?}$ and $m \angle C = \underline{?}$.

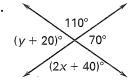
10. If
$$m \angle B = 83^{\circ}$$
, then $m \angle A = \underline{?}$ and $m \angle C = \underline{?}$.

11. If
$$m \angle C = 127^{\circ}$$
, then $m \angle B = \underline{?}$ and $m \angle A = \underline{?}$.

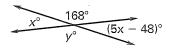
12. If
$$m \angle A = 45^{\circ}$$
, then $m \angle B = ?$ and $m \angle C = ?$.

Find the value(s) of the variable(s).

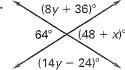
13.



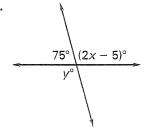
14



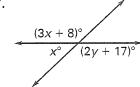
15



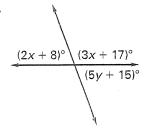
16.



17.



18.



In Exercises 19 and 20, assume that $\angle A$ is supplementary to $\angle B$ and complementary to $\angle C$. Determine $m\angle A$, $m\angle B$, and $m\angle C$.

19.
$$m \angle A = x^{\circ}, m \angle B = (x + 40)^{\circ}, m \angle C = (x - 50)^{\circ}$$

20.
$$m \angle A = x^{\circ}$$
, $m \angle B = (2x)^{\circ}$, $m \angle C = (x - 30)^{\circ}$