Geometry 5.1b Day 1 Worksheet Answers

1.

- a. Alternate Interior (picture may vary)
- b. Alternate Exterior (picture may vary)
- c. Corresponding angles (picture may vary)
- 2. x = 56
- $3. m \angle 1 = m \angle 2 = 120^{\circ}$
- 4. $m∠1 = 100^\circ$, $m∠2 = 100^\circ$
- 5. Vertical angles are congruent
- 6. Alternate exterior angles are congruent

7. $m \angle 1 = 56^{\circ}$

8. Corresponding angles are congruent

9. *m*∠2 = 56°

- 10. The sum has to equal 180° for consecutive interior angles if the lines are parallel
- 11. $\angle 4$ and $\angle 5$, $\angle 3$ and $\angle 6$
- 12. $\angle A \cong \angle C$ since vertical angles are congruent. Answer may vary

13.
$$d = 75^{\circ}$$

- $14. \qquad m \angle ABC = 145^{\circ}$
- 15. Yes, answers may vary
- 16. $\angle 5$ should equal 68° so corresponding angles are congruent.
- 17. $\angle 8 = 80^{\circ}$
- 18. $m \angle 5 = 155^{\circ}$
- 19. $\angle 2$ and $\angle 8$, $\angle 1$ and $\angle 7$
- $20. \qquad \angle 1 \cong \angle 3 \cong \angle 6 \cong \angle 7$