## Answers for Lesson 7-1, pp. 305-306 Exercises

1. No; they do not share a common side.
2. Yes; they share a common vertex and a common side, but no common interior points.
3. No; they do not share a common vertex.
4. No; only angles with measures less than $90^{\circ}$ have complements.

5-7. Answers may vary. Samples are given.
5. $\angle M R Q$ and $\angle N R P ; \angle N R P$ and $\angle Q R P ; 80^{\circ}$
6. $\angle C K J$ and $\angle D K H ; \angle C K G$ and $\angle G K H ; 90^{\circ}$
7. $\angle B D C$ and $\angle T D Y ; \angle C D V$ and $\angle V D Y ; 40^{\circ}$
8. $166^{\circ}$
9. $156^{\circ}$
10. $35^{\circ}$
11. $141^{\circ}$
12. $64^{\circ}$
13. $m \angle 1=152^{\circ} ; m \angle 2=28^{\circ}$; $m \angle 3=62^{\circ} ; m \angle 4=90^{\circ}$
14. $m \angle 1=46^{\circ} ; m \angle 2=90^{\circ}$;
15. $m \angle 1=29^{\circ} ; m \angle 2=119^{\circ}$;
$m \angle 3=44^{\circ} ; m \angle 4=136^{\circ}$ $m \angle 3=61^{\circ} ; m \angle 4=29^{\circ}$; $m \angle 5=61^{\circ}$
16. $50^{\circ}$ right angles; complementary
17. $58^{\circ} ; 148^{\circ}$
18. $13^{\circ} ; 103^{\circ}$
19. $4.1^{\circ} ; 94.1^{\circ}$
20. $47.7^{\circ} ; 137.7^{\circ}$
21. $83.9^{\circ}$; $173.9^{\circ}$
22. No; they do not share a common side.
23. No; they are adjacent.

24-25. Answers may vary. Samples are given.
24. $\angle 1$ and $\angle 2$
25. $\angle 5$ and $\angle 7$
26. Yes; $\angle 5$ is supplementary to $\angle 6$. Since $m \angle 1=m \angle 6, \angle 1$ and $\angle 5$ are supplementary angles.

## 27. Yes; two right angles are supplementary and have measures of $90^{\circ}$.

28. adjacent
29. $140^{\circ}$
30. $\angle K B L$
31. $76^{\circ}$
32. B; vertical angles are opposite each other, while adjacent angles share a common side.
33. A
34. G
35. \$90
