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° have complements. 5–7. Answers may vary. Samples are given. **5.** \angle *MRQ* and \angle *NRP*; \angle *NRP* and \angle *QRP*; 80° 6. $\angle CKJ$ and $\angle DKH$; $\angle CKG$ and $\angle GKH$; 90° 7. $\angle BDC$ and $\angle TDY$; $\angle CDV$ and $\angle VDY$; 40° **8.** 166° **9.** 156° **10.** 35° **11.** 141° **13.** $m \angle 1 = 152^{\circ}; m \angle 2 = 28^{\circ};$ **12.** 64° $m \angle 3 = 62^{\circ}; m \angle 4 = 90^{\circ}$ **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° right angles; complementary **17.** 58°; 148° **18.** 13°; 103° **19.** 4.1°; 94.1° **20.** 47.7°; 137.7° **21.** 83.9°; 173.9° **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 $\angle 7$

© Pearson Education, Inc., publishing as Pearson Prentice Hall. All rights reserved

77

Answers for Lesson 7-1, pp. 305–306 Exercises (cont.)

- **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°.

28. adjacent	29. ∠ <i>KBL</i>

- **30.** 140° **31.** 76°
- **32.** B; vertical angles are opposite each other, while adjacent angles share a common side.

33. A **34.** G **35.** \$90

Course 3

78