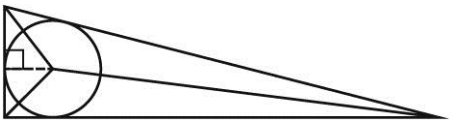
MODULE 15 Proofs with Triangles and Quadrilaterals

LESSON 15-5

Practice and Problem Solving: A/B

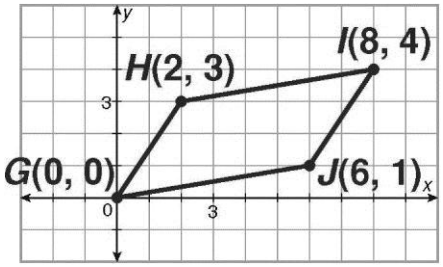
1. 27.5°
2. $\sqrt{2}$
3. 90
4. 9
5. 23°
6. 54°
7. 36°
8. 64.3
9. 64.3
10. Possible answer: Raleigh needs to find the incircle of the triangle. The incircle just touches all three sides of the triangle, so it is the largest circle that will fit. The incircle can be found by drawing the angle bisector from each vertex of the triangle. The incircle is drawn with the incenter as the center and a radius equal to the distance to one of the sides.



LESSON 15-6

Practice and Problem Solving: A/B

1. 6
2. 100°
3. 80°
4. 2 ft
5. $4\frac{1}{2}$ ft
6. 9 ft
7. 105°
8. 75°
9. 105°

10. 

11. 3

12. 2

13. 8; 4

14. See graph.

15. $\frac{1}{6}$; $\frac{1}{6}$

16. If two lines have the same slope they are parallel. $\overline{IH}$ and $\overline{JG}$ have the same slope so they are parallel.

LESSON 15-7

Practice and Problem Solving: A/B

1. rhombus
2. perpendicular
3. diagonals
4. rhombus
5. rectangle
6. Not valid; Possible explanation: You need to know that $\overline{AC} \perp \overline{BD}$.
7. Not valid; Possible explanation: You need to know that $\overline{AC}$ and $\overline{BD}$ bisect each other.
8. parallelogram
9. rectangle
10. rhombus
11. rectangle; rhombus