

Independent Practice

10.2

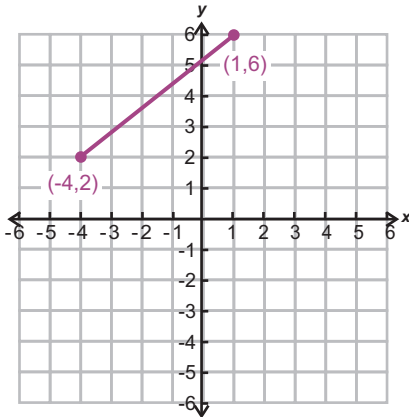
NAME _____

Module 10 Coordinate Geometry and Spatial Visualization

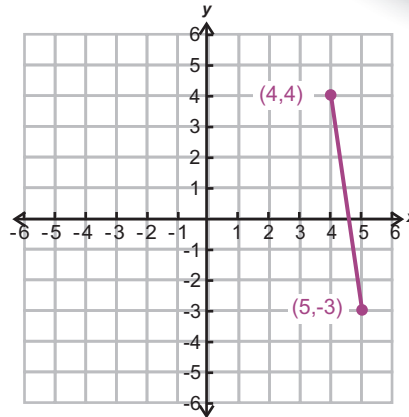
Lesson 2 Classifying Geometric Figures Using Points

Graph the line segment with the given endpoints.

1. $(-4, 2), (1, 6)$

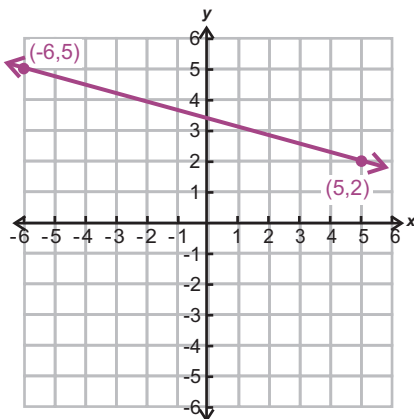


2. $(4, 4), (5, -3)$

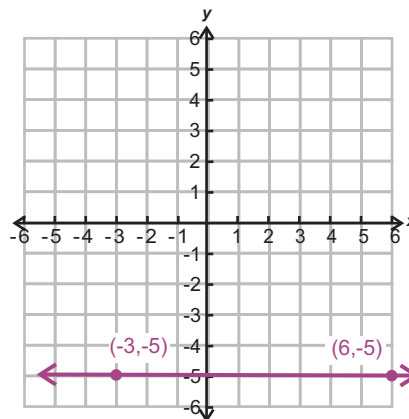


Graph the line that contains the given points.

3. $(-6, 5), (5, 2)$

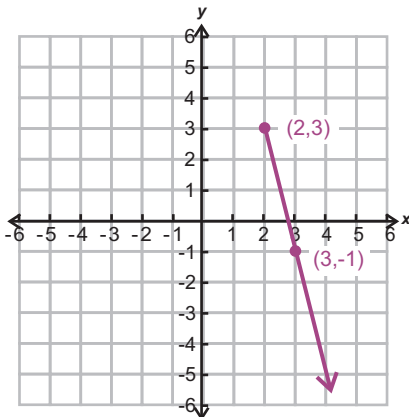


4. $(-3, -5), (6, -5)$

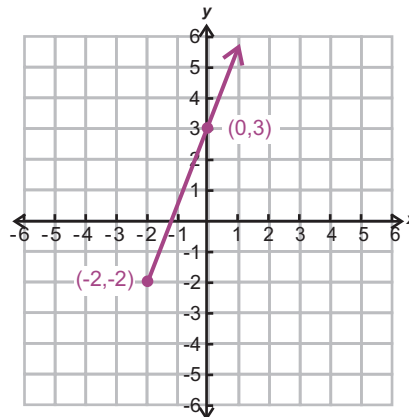


Graph the ray whose endpoint is the first point and passes through the second point.

5. $(2, 3), (3, -1)$

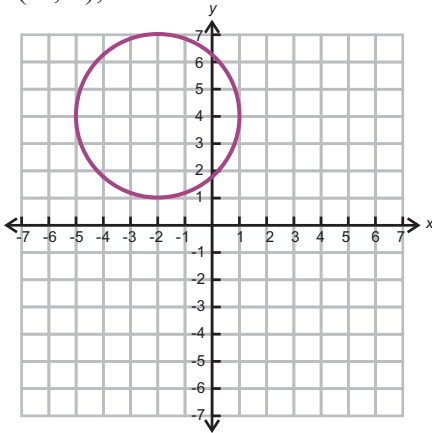


6. $(-2, -2), (0, 3)$

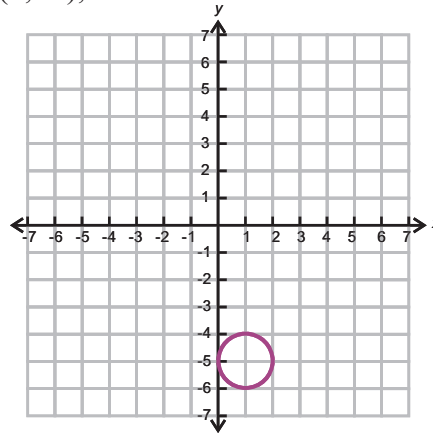


Graph the circle with the given center and radius.

7. $(-2, 4), r = 3$

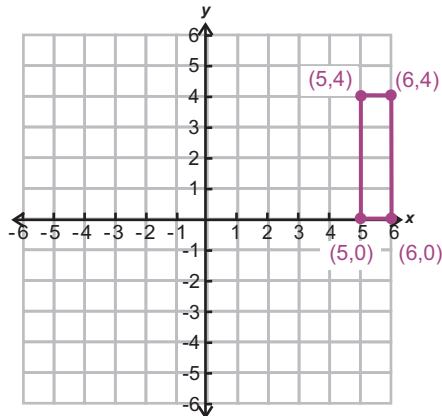


8. $(1, -5), r = 1$



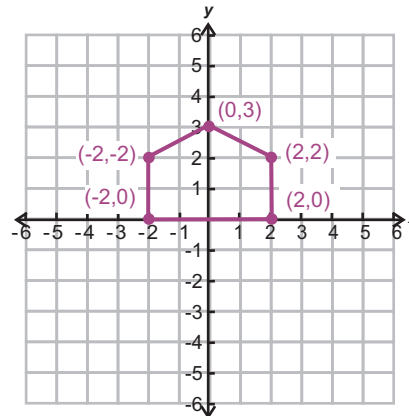
Graph the polygon with the given vertices and classify it as specifically as possible.

9. $(5, 0), (5, 4), (6, 4), (6, 0)$



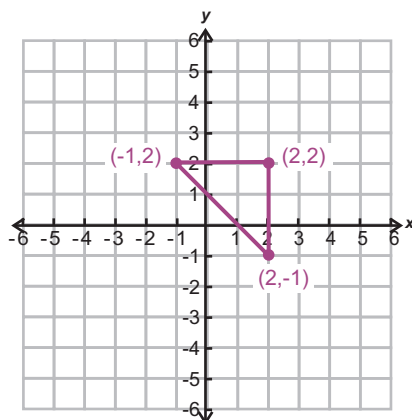
Rectangle

10. $(-2, 2), (0, 3), (2, 2), (2, 0), (-2, 0)$



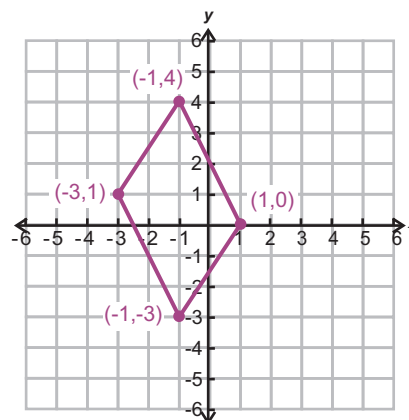
Pentagon

11. $(-1, 2), (2, 2), (2, -1)$



Isosceles right triangle

12. $(-3, 1), (-1, 4), (1, 0), (-1, -3)$



Parallelogram

NAME _____

Module 10 **Coordinate Geometry and Spatial Visualization**
Lesson 2 **Classifying Geometric Figures Using Points**

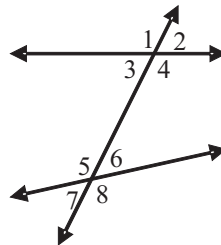
Journal

1. How is graphing a line and graphing a line segment on a coordinate plane the same?
How is it different?
2. How is graphing a line segment and graphing a ray on a coordinate plane the same?
How is it different?
3. Explain how to graph a circle on a coordinate plane given that its center is at $(3, 5)$ and its radius is four units.

Cumulative Review

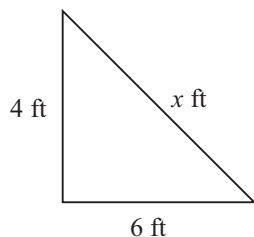
Give the special angle pair name for each pair of angles.

1. $\angle 2$ and $\angle 6$ **Corresponding**
2. $\angle 1$ and $\angle 8$ **Alternate exterior**
3. $\angle 4$ and $\angle 5$ **Alternate interior**
4. $\angle 6$ and $\angle 7$ **Vertical**



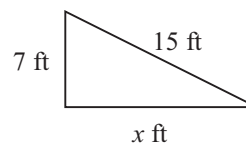
Find the value of x . Round to the nearest tenth.

5.



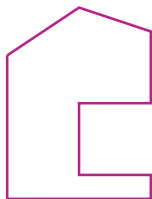
$x = 7.2$ ft

6.



$x = 13.3$ ft

7. Sketch a concave nonagon.



8. Graph and label each point.

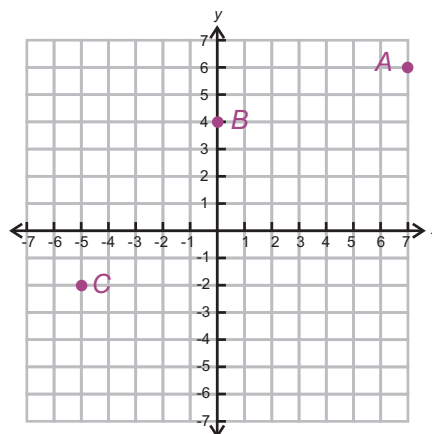
$A(7, 6)$

$B(0, 4)$

$C(-5, -2)$

9. Which quadrant contains point C ? **Quadrant III**

10. On which axis does point B lie on? **y -axis**



Possible Journal Answers

- Graphing a line and a line segment both require having at least two points to plot. However, with the line, the two points are any two points on the line, but with a line segment, they are the endpoints. Also, arrows must be added to the end of a line. A line segment does not have arrows.
- Graphing a line segment and a ray also requires having at least two plots to point. With a line segment, both points are endpoints, but with a ray, only one point is an endpoint. The other point is any other point on the ray. A line segment has no arrows; a ray will have one arrow.
- To graph a circle, first plot the center point. Then, use the radius of four to find points on the circle. Plot points that are four units above, below, left, and right from the center point. Then, sketch the circle that contains those points. Another way to graph a circle is to open a compass to the length of four units on the coordinate plane and to draw the circle with the compass point on the center point.