**NAME** 

**Coordinate Geometry and Spatial Visualization** Module 10 Lesson 3 **Coordinate Geometry** 

**Independent Practice** 

Find the distance from point A to point B. Then, find the coordinate of the midpoint of  $\overline{AB}$ .

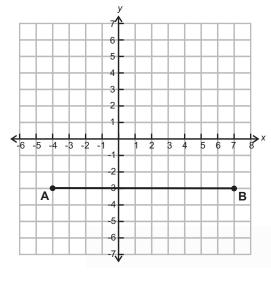
1. 
$$(-10-8-6-4-2 \ 0 \ 2 \ 4 \ 6 \ 8 \ 10)$$
2.  $(-10-8-6-4-2 \ 0 \ 2 \ 4 \ 6 \ 8 \ 10)$ 

3. 
$$(-10-8-6-4-2 \ 0 \ 2 \ 4 \ 6 \ 8 \ 10)$$

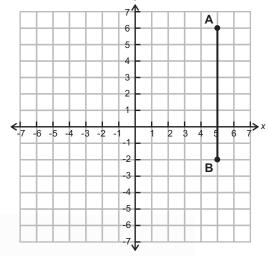
4. 
$$\stackrel{A}{\longleftarrow} \stackrel{B}{\longleftarrow} \stackrel{B}{\longleftarrow} \stackrel{A}{\longleftarrow} \stackrel{A}{\longrightarrow} \stackrel$$

Find the distance from point A to point B.

5.



**6.** 

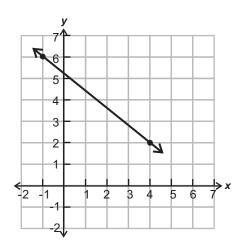


7. Find the distance from (-3, 7) to (9, 2).

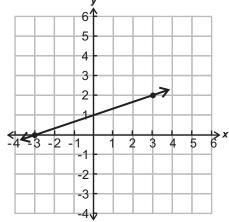
**8.** Find the distance from (-2, -4) to (6, -1).

Find the slope.

9.

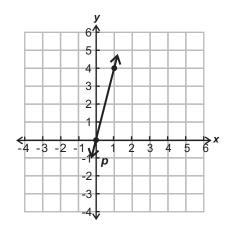


**10.** 

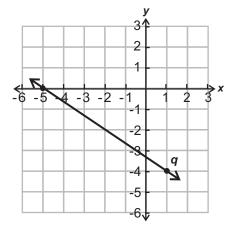


## Module 10 Coordinate Geometry and Spatial Visualization Lesson 3 Coordinate Geometry

11. Find the slope of any line parallel to line p.



12. Find the slope of any line perpendicular to line q.



## **Journal**

- 1. What does it mean for a point to be the midpoint of a segment? Explain how to find the coordinate of the midpoint of a segment on a number line when you know the coordinates of the endpoints of the segment.
- 2. Describe what you can tell about the slope of a line just by looking at the line.
- 3. Which is steeper: a line with a slope of  $\frac{1}{2}$  or a line with a slope of  $\frac{1}{8}$ ? Explain.
- **4.** Which is steeper: a line with a slope of  $\frac{1}{2}$  or a line with a slope of  $-\frac{1}{2}$ ? Explain.

## **Cumulative Review**

 $\triangle APE \cong \triangle BUG$ 

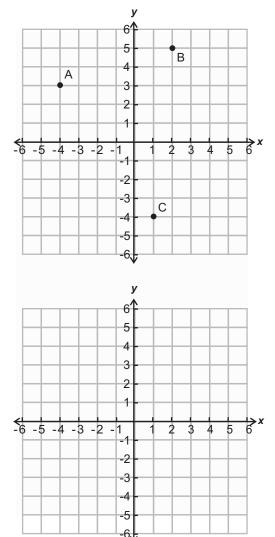
- 1. Which angle corresponds to  $\angle P$ ?
- **2.** Which segment corresponds to  $\overline{AE}$ ?

Write the ordered pair representing each point.

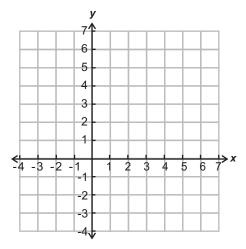
- **3.** A
- **4.** *B*
- **5.** *C*

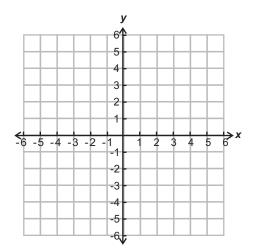
Plot and label each point.

- **6.** D(0, -2)
- 7. *E*(-3, -4)
- **8.** *F*(1, -3)



- **9.** Graph the line that contains (-3, -1) and (6, -2).
- 10. Graph and classify the triangle with vertices at the origin, (2, 2), and (5, 0).





## **Additional Work Area**

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