

# Independent Practice

## 10.1

NAME \_\_\_\_\_

Module 10 Coordinate Geometry and Spatial Visualization

Lesson 1 Points in a Coordinate Plane

Write the ordered pair representing each point.

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

2.  $B$   $(-9, -4)$

3.  $C$   $(5, -5)$

4.  $D$   $(0, 3)$

5.  $E$   $(4, 2)$

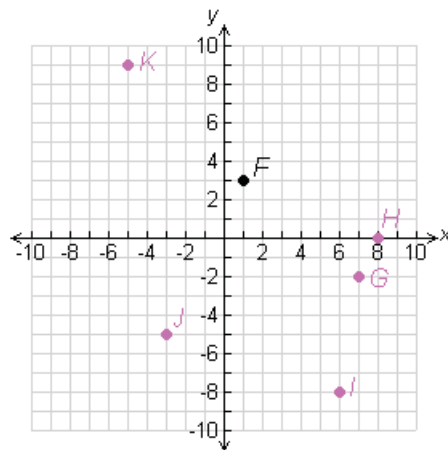
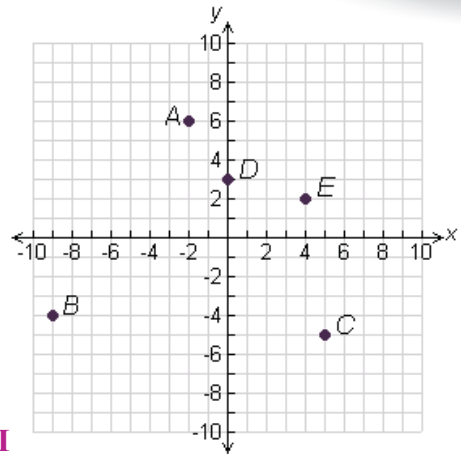
6. Which point is in Quadrant II?  $A$

7. In which quadrant is point  $E$  located? **Quadrant I**

8. On which axis is point  $D$  located? **The  $y$ -axis**

9. Plot and label each point. The first one has been done.

$F(1, 3)$   $G(7, -2)$   $H(8, 0)$   $I(6, -8)$   $J(-3, -5)$   $K(-5, 9)$



10. Juan plotted a point with coordinates  $(2, y)$ . If the value of  $y$  is one plus three times the opposite of  $x$ , what is the value of  $y$  and in which quadrant is the point located in?

**-5: Quadrant IV**

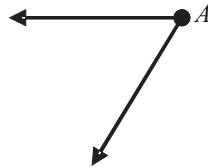
## Journal

1. Explain how to plot the point whose coordinates are  $(4, -6)$ .
2. Into how many quadrants do the  $x$ -axis and  $y$ -axis divide the coordinate plane? Explain how they are numbered.
3. Terri said the point whose coordinates are  $(0, -4)$  is located on the  $x$ -axis. Paul said the point is located on the  $y$ -axis. Who is correct and why?

## Cumulative Review

1. Estimate  $m\angle A$ .

$60^\circ$



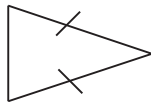
2. Find the measure of the complement and supplement of an angle whose measure is  $78^\circ$ .

**Complement:  $12^\circ$**

**Supplement:  $102^\circ$**

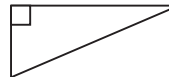
Classify the triangle by its sides and by its angle measures.

- 3.



**Acute isosceles**

- 4.



**Right scalene**

Determine if a triangle with the given side lengths is a right triangle.

5. 12, 16, 20

**Yes**

6. 8, 14, 17

**No**

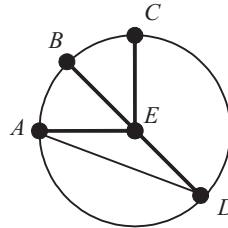
For each segment in circle  $E$ , write *radius*, *diameter*, and/or *chord*.

7.  $\overline{BE}$  **Radius**

8.  $\overline{AD}$  **Chord**

9.  $\overline{BD}$  **Chord, diameter**

10.  $\overline{EC}$  **Radius**



### Possible Journal Answers

- To plot a point whose coordinates are (4, -6), start at the origin and move to the right four units because the  $x$ -coordinate (four) is positive. From that point, move down six units because the  $y$ -coordinate (-6) is negative. Draw a dot at that location.
- The  $x$ -coordinate and  $y$ -coordinate divide the plane into four quadrants. The first quadrant is the top right quadrant. The quadrant numbers increase in a counterclockwise direction making the top left quadrant the second quadrant, the bottom left quadrant the third quadrant, and the bottom right quadrant the fourth quadrant. They are numbered with Roman numerals: I, II, III, and IV.
- Paul is correct. To locate a point whose coordinates are (0, -4), start at the origin and move zero units on the  $x$ -axis. That means zero units right or left, which is the same as remaining at the origin. From there, move down four units. The point is on the vertical  $y$ -axis.

