

Name _____
Date _____

Module #1:
Worksheet 2d: Coordinate Plane

 **View Tutorial 2d**

↪ **Objective:** Graph a given point, name the coordinates of a given point, and name the quadrant in which a point is located.

Ordered Pairs

In the diagram at the right, the two perpendicular lines, called the x-axis and the y-axis, divide the coordinate plane into Quadrants I, II, III, and IV. The point where the two axes intersect is called the *origin*. The *origin* is represented by the ordered pair (0,0).

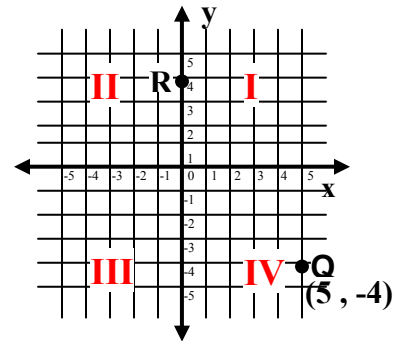
Every other point in the coordinate plane is also represented by an ordered pair of numbers. The ordered pair for point **Q** is (5, -4). We say that 5 is the x-coordinate of **Q** and -4 is the y-coordinate of **Q**.

Example: Write the ordered pair for the point **R** in the diagram.

Note: Point R is not in any quadrant, but rather directly on the y-axis.

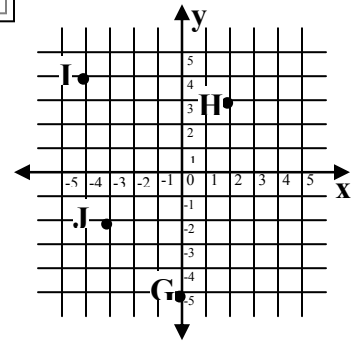
The x-coordinate is 0 and the y-coordinate is 4. Thus, the ordered pair for R is (0, 4).

To graph any ordered pair (x, y), begin at the *origin*. Move left or right x units. From there, move up or down y units. Draw a dot at that point.



Graph each point on the coordinate plane at the right:

- | | |
|---------------|--------------|
| 1. $A(0,0)$ | 2. $B(5,0)$ |
| 3. $C(-3,4)$ | 4. $D(4,-5)$ |
| 5. $E(-2,-3)$ | 6. $F(2,-1)$ |



Write the ordered pair for each point shown at the right:

- | | | | |
|--------------|--------------|--------------|---------------|
| 7. G _____ | 8. H _____ | 9. I _____ | 10. J _____ |
|--------------|--------------|--------------|---------------|

Each of the following statements describes the conditions of a point. Name the quadrant or axis on which the point is located:

- | | | |
|--------------------|--------------------|--------------------|
| 11. $x > 0, y > 0$ | 12. $x < 0, y < 0$ | 13. $x > 0, y < 0$ |
| 14. $x = 2, y > 0$ | 15. $x = 0, y < 0$ | 16. $x < 0, y = 6$ |