

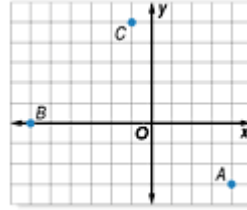
Lesson 2-6

Example 1 Write Ordered Pairs

Write the ordered pair that names each point.

a. **A**

The x -coordinate is 4.
The y -coordinate is -3 .
The ordered pair is $(4, -3)$.



b. **B**

The x -coordinate is -6 .
The point lies on the x -axis, so its y -coordinate is 0.
The ordered pair is $(-6, 0)$.

c. **C**

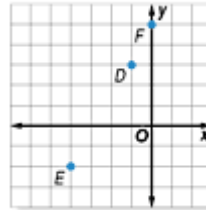
The x -coordinate is -1 .
The y -coordinate is 5.
The ordered pair is $(-1, 5)$.

Example 2 Graph Points and Name Quadrant

Graph and label each point on a coordinate plane. Name the quadrant in which each point lies.

a. **$D(-1, 3)$**

Start at the origin. Move 1 unit left.
Then move 3 units up and draw a dot.
Point $D(-1, 3)$ is in quadrant II.



b. **$E(-4, -2)$**

Start at the origin. Move 4 units left. Then move 2 units down and draw a dot.
Point $E(-4, -2)$ is in quadrant III.

c. **$F(0, 5)$**

Start at the origin. Since the x -coordinate is 0, the point lies on the y -axis. Move 5 units up and draw a dot. Point $F(0, 5)$ is not in any quadrant.

Example 3 Graph an Algebraic Relationship

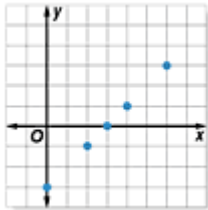
The difference of two numbers is 3. If x represents the first number and y represents the second number, make a table of possible values for x and y . Graph the ordered pairs and describe the graph.

First, make a table. Choose values for x and y that have a difference of 3.

$$x - y = 3$$

x	y	(x, y)
4	1	(4, 1)
6	3	(6, 3)
2	-1	(2, -1)
3	0	(3, 0)
0	-3	(0, -3)

Then graph the ordered pairs on a coordinate plane.



The points on the graph are in a line that slants upward to the right. The line crosses the y -axis at $y = -3$.