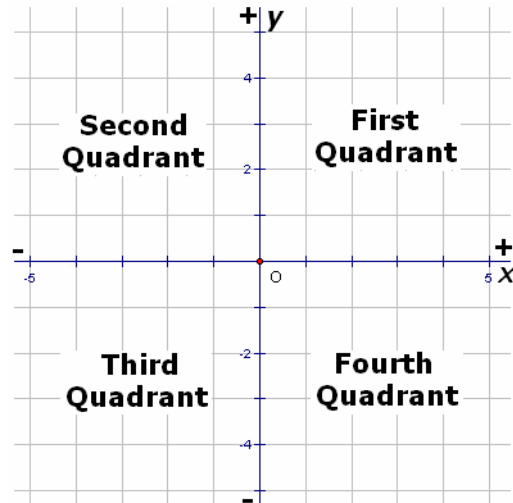


## Get Ready for Grade 9 Plotting Points Worked Examples and Practice

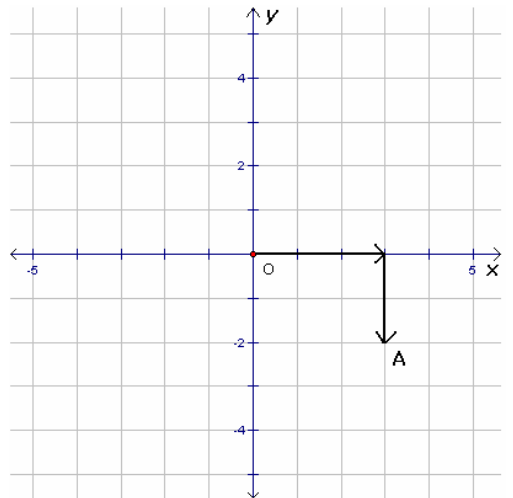
**Example 1:** What quadrant does the point  $P(-2, 1)$  lie in?

**Solution:** The positive and negative directions of the  $x$ - and  $y$ -axes, as well as the quadrants, are shown. Since the  $x$ -coordinate is negative, and the  $y$ -coordinate is positive, the point lies in the second quadrant.



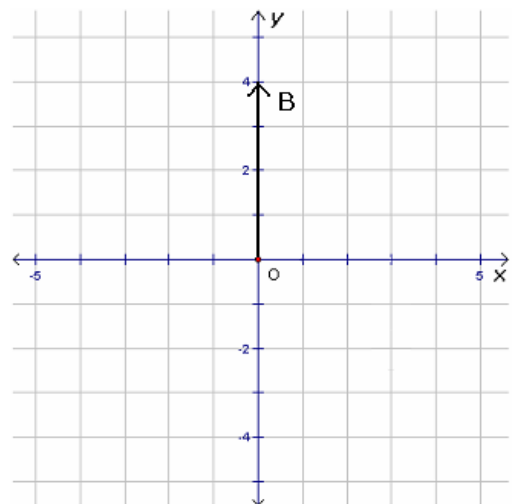
**Example 2:** Plot the point  $A(3, -2)$ .

**Solution:** The  $x$ -coordinate is positive. Move 3 units to the right. The  $y$ -coordinate is negative. Move 2 units down.



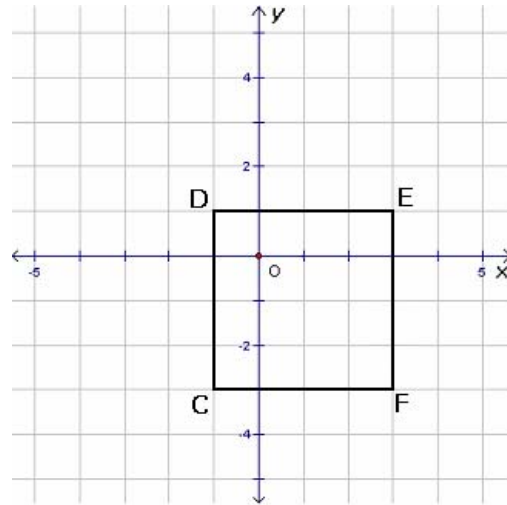
**Example 3:** Plot the point  $B(0, 4)$ .

**Solution:** The  $x$ -coordinate is 0. Therefore, point  $B$  lies on the  $y$ -axis. The  $y$ -coordinate is positive. Move up 4 units.



**Example 4:** Plot the points  $C(-1, -3)$ ,  $D(-1, 1)$ ,  $E(3, 1)$  and  $F(3, -3)$ . What geometric shape is formed by joining the points?

**Solution:** The plotted points are shown. The shape is a square.



**Practice:**

1. What quadrant does the point  $Q(5, -2)$  lie in?
2. Give directions, from the origin, for plotting the point  $R(-3, -4)$ .
3. Describe the location of the point  $S(4, 0)$ .
4. Plot the points  $G(-2, -4)$ ,  $H(-1, 2)$ ,  $I(5, 2)$  and  $J(4, -4)$ . What geometric figure is formed by joining the points?

Answers:

1. fourth quadrant
2. left 3 units and down 4 units
3. on the x-axis and right 4 units
4. a parallelogram