Name:

## **The Cartesian Plane and Plotting Points**

- The Cartesian Plane is a 2-D surface
  - o It has a left-to-right axis

The x - axis

- And an up and down axis
- The y axis
- o Think of them as two number lines, one horizontal and one vertical that cross at 0
- o And is made up of four quadrants with distinct coordinate properties
- Every single **point** of the plane is comprised of **two coordinates**

(x, y)

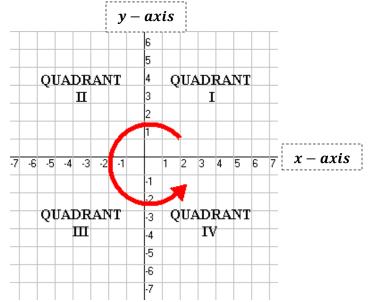
- The *x* signifies the **EAST-WEST movement**
- $\circ$  The  $oldsymbol{y}$  signifies the NORTH-SOUTH movement

Quadrant I: (+,+)

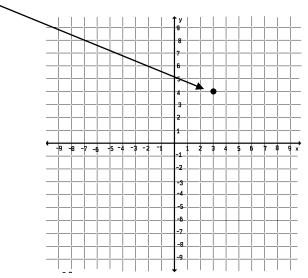
Quadrant II: (-,+)

Quadrant III: (-,-)

Quadrant IV: (+,-)



• A point at (3, 4) has moved to the right three, and up four

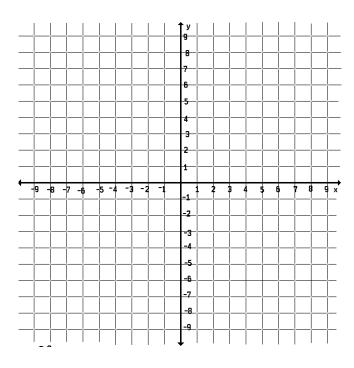


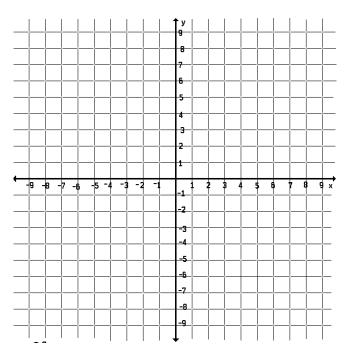
## **Practice:**

Plot the following point on the grid provided:

$$(1,4), (-2,6), (-7,-2), (9,-3), (0,0)$$

$$(-7,4), (2,-1), (-4,-1), (9,3), (5,-5)$$

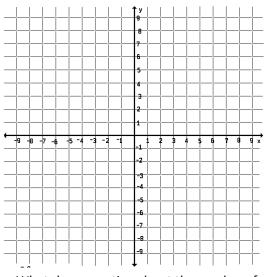


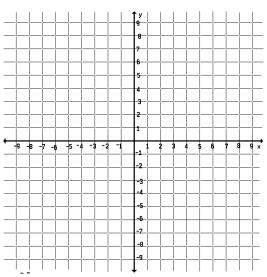


Plot the following points of the grid provided:

$$(1,0), (-2,0), (-7,0), (9,0), (-6,0)$$

$$(0,4),(0,-1),(0,-6),(0,2),(0,-5),$$





What do you notice about the y-value of each point?

What do you notice about the x-value of each point?

What does this signify?