Name:

## The Cartesian Plane and Plotting Points

- The Cartesian Plane is a 2-D surface
- It has a left-to-right axis
The $x$-axis
- And an up and down axis
The $y$-axis
- Think of them as two number lines, one horizontal and one vertical that cross at 0
- 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 $\boldsymbol{x}$ signifies the EAST-WEST movement
- The $\boldsymbol{y}$ signifies the NORTH-SOUTH movement

Quadrant I: $\quad(+,+)$
Quadrant II: (-,+)

Quadrant III: (-,-)
Quadrant IV: $\quad(+,-)$


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



## Practice:

Plot the following point on the grid provided:

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



Plot the following points of the grid provided:

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



What do you notice about the $y$-value of each point?
$(-7,4),(2,-1),(-4,-1),(9,3),(5,-5)$

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


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

What does this signify?

