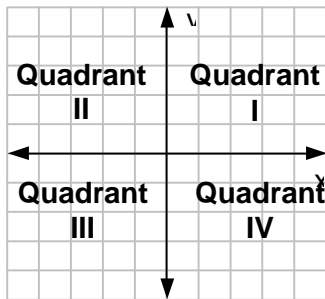
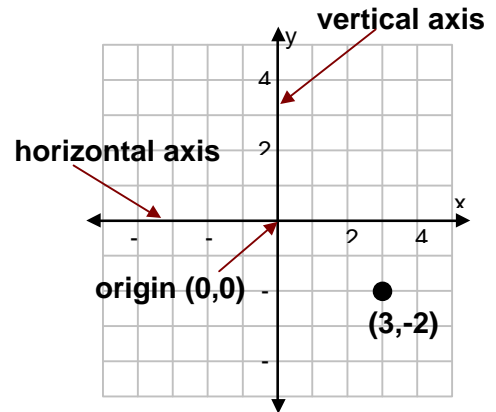


## Section 4.1 Coordinates and Scatter Plots

### Coordinate Plane

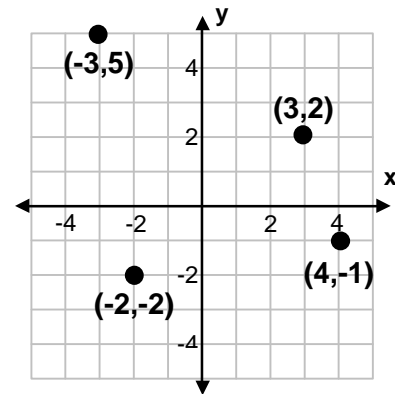
x-axis – horizontal  
y-axis – vertical

**Ordered Pair** – Each point on a coordinate plane corresponds to an ordered pair. The first point is the x-coordinate and the second point is the y-coordinate. The point  $(3, -2)$  is shown on the graph.



**Quadrants** – A coordinate plane is divided into 4 quadrants numbered I, II, III, and IV (note the roman numerals). If a point lies on the x or y axis, it is not in any quadrant.

**Example:** Plot  $(3,2)$ ,  $(4,-1)$ ,  $(-3,5)$  and  $(-2,-2)$  on a coordinate plane.



Things to remember when plotting or graphing on a coordinate plane:

1. Draw the horizontal and vertical axis with arrows on their ends
2. Always label the axes
3. Put a scale on the axes (a few numbers on each so we can tell what you are counting by)

**Scatter Plots** – Scatter plots can be used to analyze data. They are a collection of ordered pairs. You should NOT connect the dots!