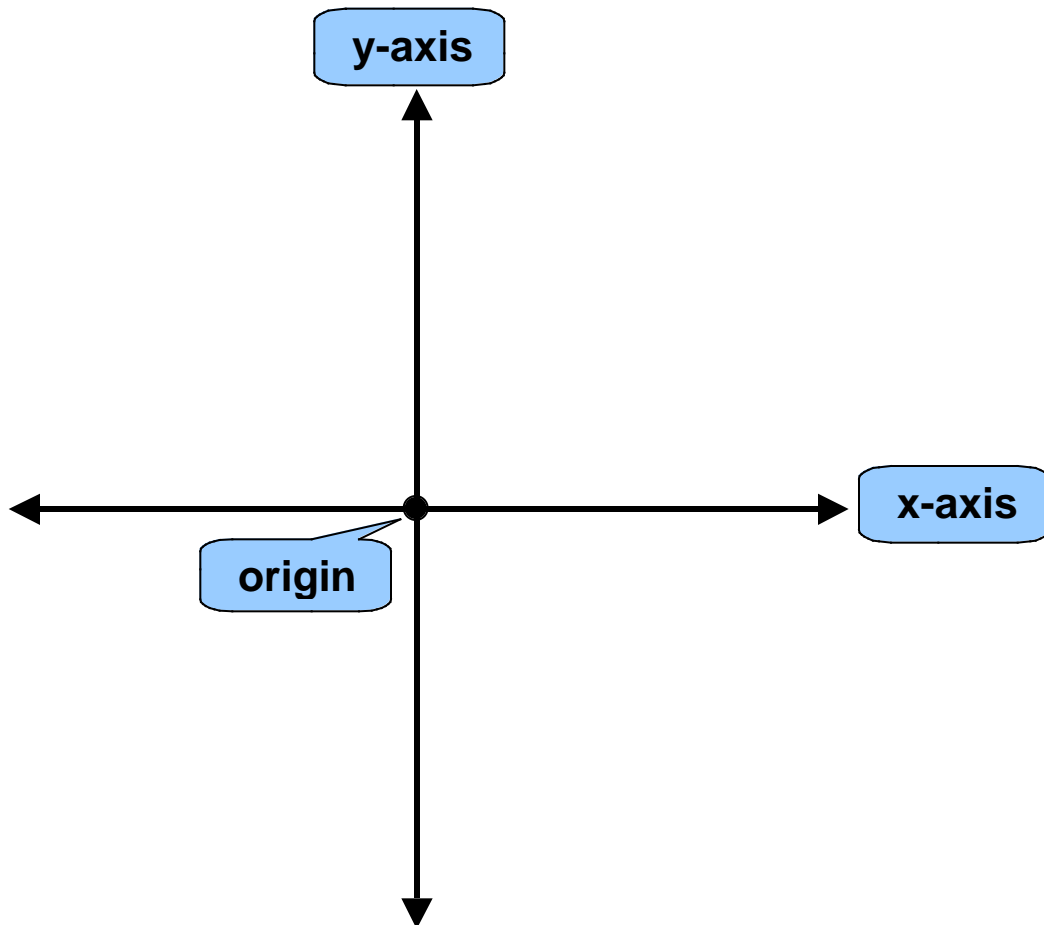


Ordered Pairs

In mathematics, any point can be located by using a coordinate system. The coordinate system is formed by the intersection of two number lines that meet at their zero points. This point is called the origin. The horizontal number line is called the x-axis and the vertical number line is called the y-axis.



Any point can be graphed on a coordinate system using an ordered pair of numbers. The first number in the pair is called the x-coordinate and the second number is the y-coordinate. The coordinates are the directions to find the point.

x-coordinate
comes first

(x,y)

y-coordinate
comes second

Example 1:

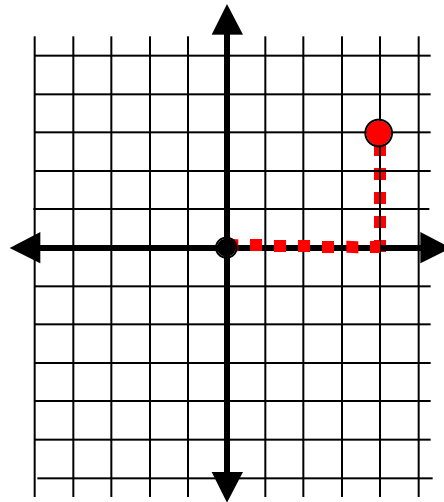
Graph (4,3)

Always begin at the origin.

The x-coordinate is 4.
That tells you to go 4 units
to the right of the origin.

The y-coordinate is 3. This
tells you to go up 3 units.

Ordered pair (4,3) is now
graphed.



Important: Always go horizontally \longleftrightarrow first.

Example 2:

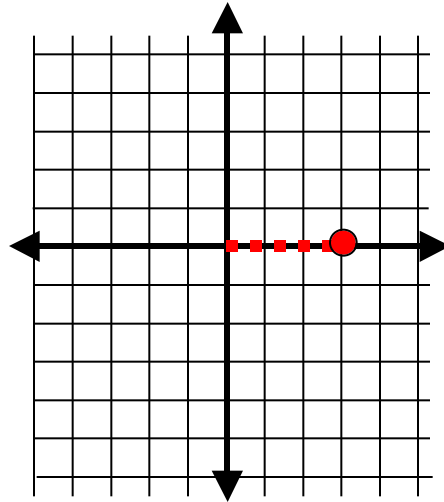
Graph $(3,0)$

Always begin at the origin.

The x-coordinate is 3.
That tells you to go 3 units
to the right of the origin.

The y-coordinate is 0 so
you will not go up to place
the point.

Ordered pair $(3,0)$ is now
graphed.



Points can be named by using letters. The symbol $S(6,3)$ means point S has an x-coordinate of 6 and a y-coordinate of 3.

Example 3:

Name the ordered pair for each point.

a. A

Go right on the x -axis to find the x -coordinate of point A, which is 2.

Go up along the y -axis to find the y -coordinate, which is 2.

The ordered pair for point A is $(2,2)$.

b. B

The x -coordinate of B is 4, and the y -coordinate is 5.

The ordered pair for point B is $(4,5)$.

