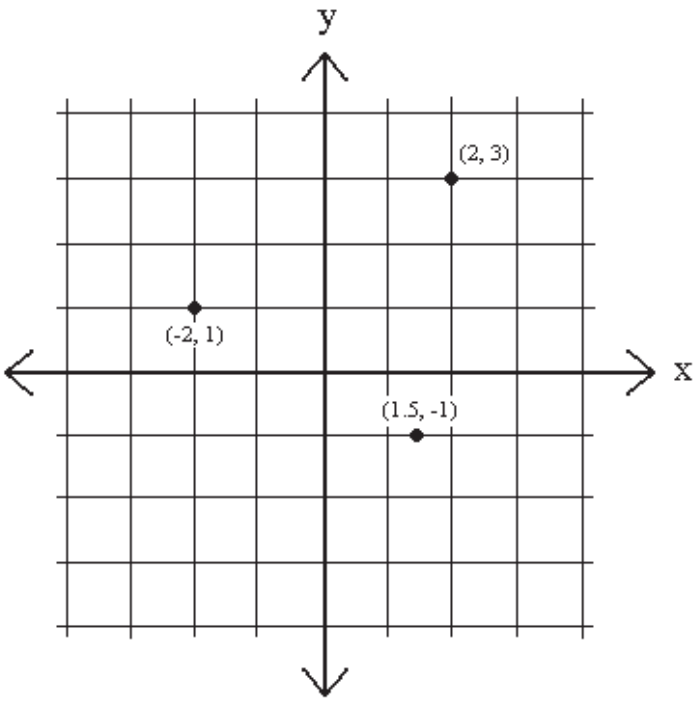
Plotting Points on a Coordinate Plane

An ordered pair is a pair of numbers in a specific order, which give the location of a point on a graph. For example, (1, 2) and (- 4, 12) are ordered pairs. The order of the two numbers is important. Ordered pairs are often used to represent two variables. When we write (x, y) = (7, - 2), we mean $x = 7$ and $y = -2$. The number which corresponds to the value of x is called the x-coordinate and the number which corresponds to the value of y is called the y-coordinate.

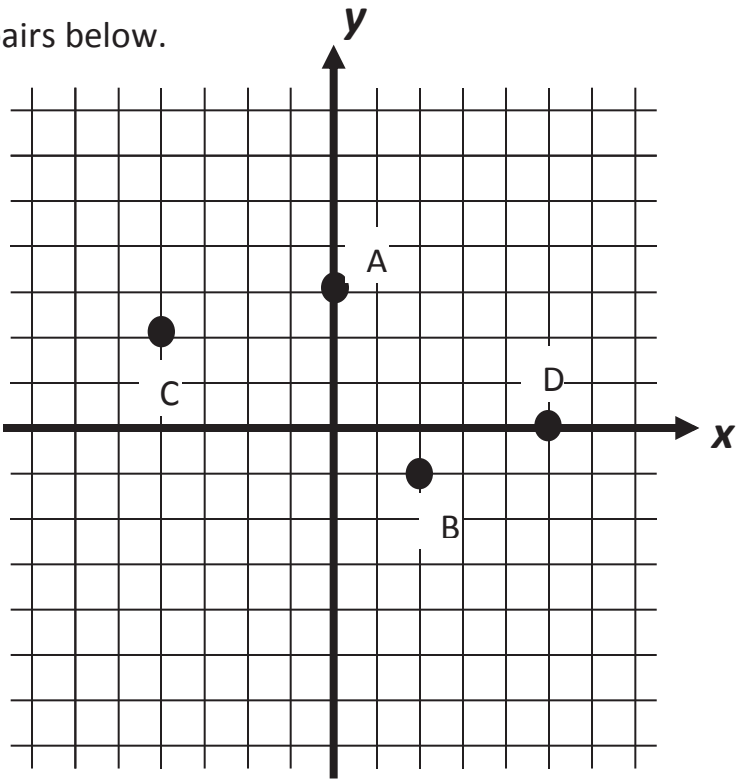
Graphing Ordered Pairs

The horizontal axis, called the x-axis, represents values of x, and the vertical axis, called the y-axis, represents values of y. To graph a point, begin at the origin (0,0), or where the x- and y-axis meet. First find the x -coordinate on the x –axis (to the left if the x-coordinate is negative or right if the x-coordinate is positive). Then move up (if the y-coordinate is positive) or down (if the y-coordinate is negative) on the graph the number of spaces which is equal to the y-coordinate. For example, to graph (2, 3), find 2 on the x -axis. Then move up 3 spaces and plot the point. To graph (- 2, 1), find -2 on the x -axis, then move up 1 space and plot the point. To graph (1.5, - 1), find 1.5 on the x -axis, then move *down* 1 space and plot the point:



State the letter that represents the ordered pairs below.

1. (0, 3) _____
2. (5,0) _____
3. (-4, 2) _____
4. (2, -1) _____



Plot the Points on the Coordinate Plane Below.

A (2, 0) B (4, 1) C (-2, 3) D (-3, 2) E (0, -3) F (2, 4)

G (3, 5) H (-5, -2) I (-3, 5) J (1, 1) K (3, 3) L (-4, -1)