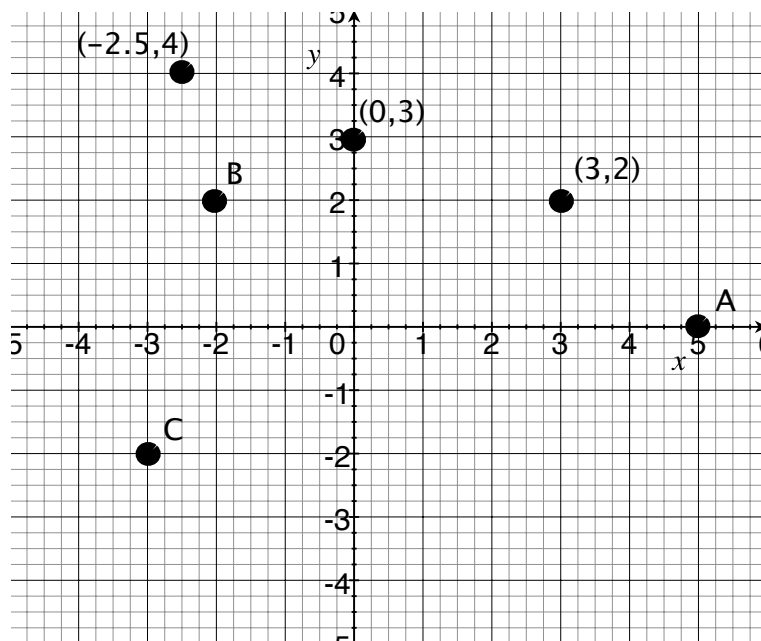


Graphs

The cartesian plane uniquely identifies all the points on a plane with two coordinates called an ordered pair.

For example, the point $(-2.5, 4)$ corresponds to the point 2.5 units to the left of the y -axis, and 4 units above the x -axis.



1. Write down the ordered pair for the following points:

(a) A

(b) B

(c) C

2. Identify the ordered pair $(2, -4)$ on the axes above.
3. The cartesian plane divides the plane into four quadrants. The first quadrant is the upper right, where both the x and y coordinates are positive. On the cartesian plane above, identify the 2nd and 4th quadrants.

Def: The *graph* of an equation in x and y , the the graph of all ordered pairs (a, b) in the coordinate plane that satisfy the given equation.

4. Consider the equation $x^2 = y$.
Notice that $2^2 = 4$ and $(-4)^2 = 16$ so both $(2, 4)$ and $(-4, 16)$ are on the graph of $x^2 = y$.
Plot three more points that are on the graph of the equation $x^2 = y$.

