Vocabulary: Points in the Coordinate Plane



**Vocabulary**

* Coordinate plane – the plane defined by a pair of perpendicular number lines, or *axes*, that intersect at a point called the *origin*.
* Coordinates – a set of numbers that names the location of a point.
	+ In the two-dimensional coordinate plane, it takes two numbers (*x*, *y*) to specify a location.

**(3, 2)**

* + - The *x*-coordinate gives the location of the point left or right of the origin.
		- The *y*-coordinate gives the location of the point above or below the origin.
		- For example, the coordinates of the point shown to the right are (3, 2).
* Ordered pair – two numbers or variables written in a certain order.
	+ (*x*, *y*) coordinates, such as (3, 2), are examples of ordered pairs.
* Origin – the point in a coordinate plane where the *x*- and
*y*-axes intersect.
	+ The coordinates of the origin are (0, 0).
	+ The origin is the point labeled on the graph to the right.
* Quadrant – one of four regions defined by the *x*- and *y*-axes of the coordinate plane.
	+ The four quadrants, labeled in the graph above, are numbered with Roman numerals: I, II, III, and IV.



* Reflect – to form a “mirror image” by flipping a point or object across a line.
	+ In the image to the right, the point on the left has been reflected over the *y*-axis to form the image on the right.
* *x*-axis – a horizontal number line that passes through the origin of the coordinate plane.
	+ The *x*-axis measures position left or right of the origin.
* *y*-axis – a vertical number line that passes through the origin of the coordinate plane.
	+ The *y*-axis measures position above or below the origin.