NAME _____ DATE _____

Module 7 Solving Linear Equations and Inequalities of Two Variables

Lesson 1 Defining Linear Equations of Two Variables and Their Solutions

guided notes

Lesson Objectives

- Find solutions to linear equations of two variables and write them as ordered pairs.
- Graph points on the Cartesian coordinate system.
- Graph horizontal and vertical lines from equations.

Because (x, y) has a first number x and a second number y it is called an

_____.

1. Find the solution to $x + 2y = 6$ when y is equal to zero. _____
2. Find the solution to $x + 2y = 6$ when x is equal to eight. _____
3. Find the solution to $x + 2y = 6$ when y is equal to one. _____
4. Find the solution to $x + 2y = 6$ when x is equal to negative one.

   _____

In the Cartesian Coordinate System, the horizontal axis is called the

_____.

The vertical axis is called the _____.

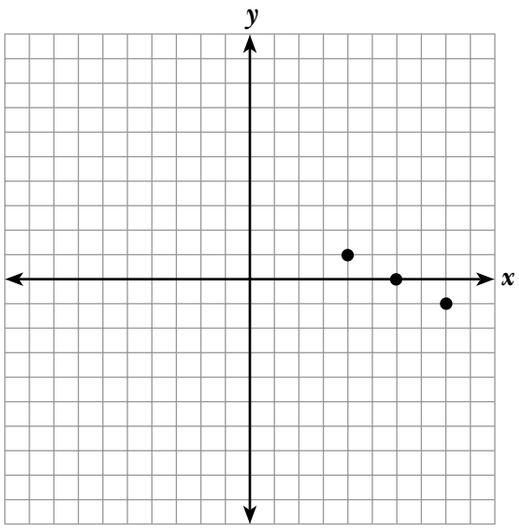
The axes intersect at a point called the _____.

The axes are called coordinate axes, and they form the _____

plane.

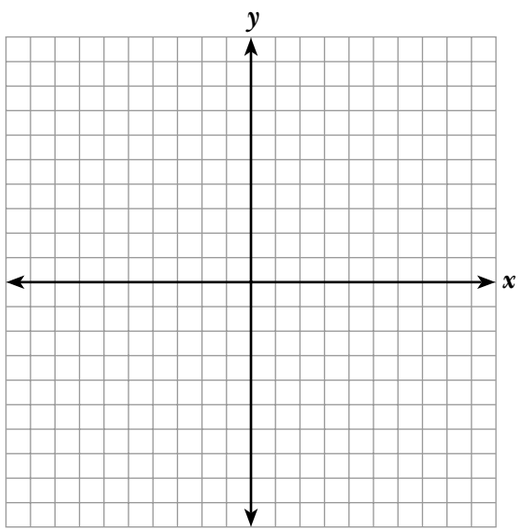
5 Plot the point (0, 3) on the same coordinate plane.

6 Plot the point $\left(-1, 3\frac{1}{2}\right)$ on the same coordinate plane.



The solutions to a _____ equation of two variables lie on a line.

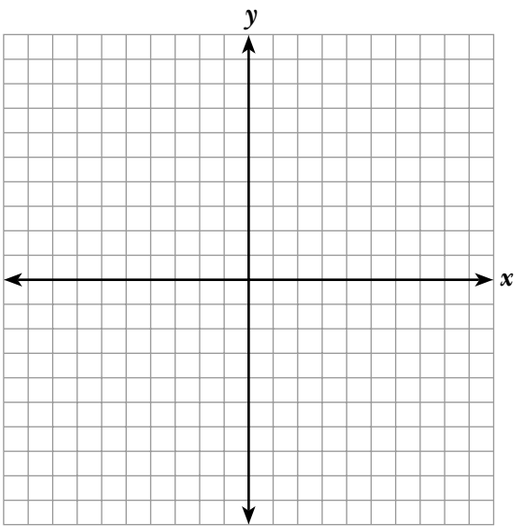
7 Graph all the solutions to the equation $y = -5$.



The graph of any equation of the form $y = b$ is a _____ line.

The y-coordinate of any point on the line is _____.

8 Graph all the solutions to the equation $x = 7$.



The graph of any equation of the form $x = a$ is a _____ line.

The x-coordinate of any point on the line is _____.