

Section 3.1: Graphing Equations ($Ax + By = C$)

Example 1:

Plot each ordered pair on a Cartesian coordinate system and name the quadrant or axis in which the point is located.

a. $(3, -2)$ _____

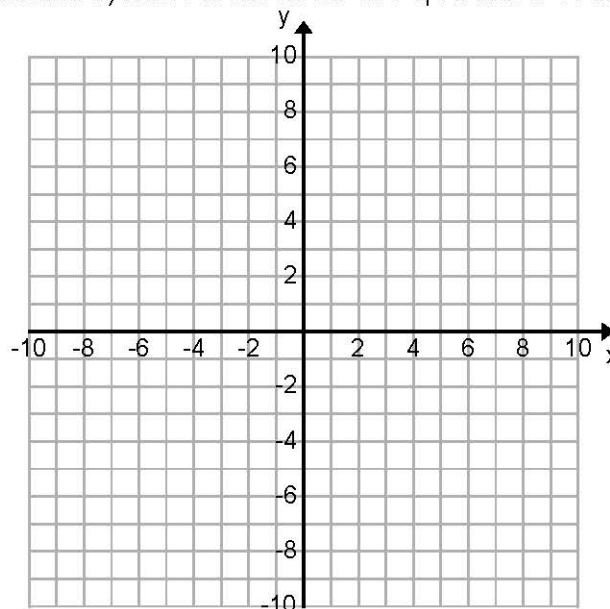
b. $(0, 3)$ _____

c. $(-4, 1)$ _____

d. $(-1, 0)$ _____

e. $(-2\frac{1}{2}, -3)$ _____

f. $(3.5, 4.5)$ _____



Standard Form of a Linear Equation

Any equation of the form $Ax + By = C$, where A , B , and C are real numbers and A and B are not both equal to 0, is called the standard form of a **Linear Equation**.

Table of Values

How to graph a Linear Equation in Two Variable

1. Locate any two points that satisfy the equation (use a third point to check your work).
2. Plot these two points.
3. Draw a straight line through these two points.

Example 2: Determine whether each equation is linear or not. Then graph the equation by finding and plotting ordered pair solutions.

a. $x + y = 4$

