

Date: _____

5.1A Rearranging & Graphing Linear Equations

Recall: A **linear equation** is an equation with one or two variables with degree 1.

Ex.

$$3x - 5y = 2$$

$$y = \frac{2}{3}x + 5$$

$$y - 4 = 0$$

$$3x + y + 9 = 0$$

To graph a linear equation (using a table of values or other method) it is generally best to have the equation in the form $y = mx + b$.

When this is not the case we rearrange the equation; using equation solving techniques (do the opposite to both sides) we solve for y .

Ex. Solve each equation for y :

a) $3x + y = 5$

c) $5x - y = 4$

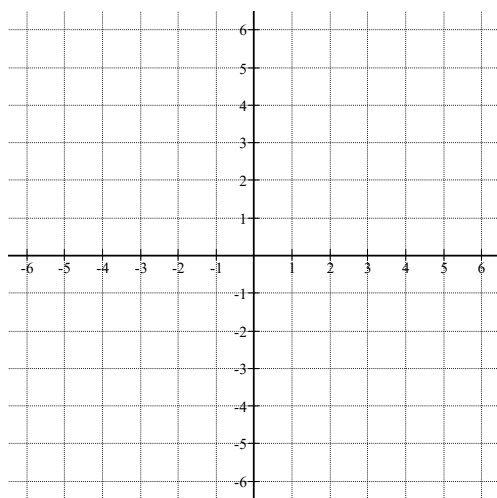
e) $3y - 2x = 0$

b) $-6x + 2y = -8$

d) $3x + 2y = 10$

f) $-9x - 3y + 4 = 0$

Ex. Graph each line using the slope and y -intercept:



$$y = \frac{2}{3}x - 4$$

$$y = -3x + 5$$

Practice: WS6.1A(148 work on separate sheet /155 on sheet)