

(15)

Graphing Linear Equations

A Linear Equation makes a straight line on a coordinate plane. $\hat{=}$ is simplified to $y = mx + b$

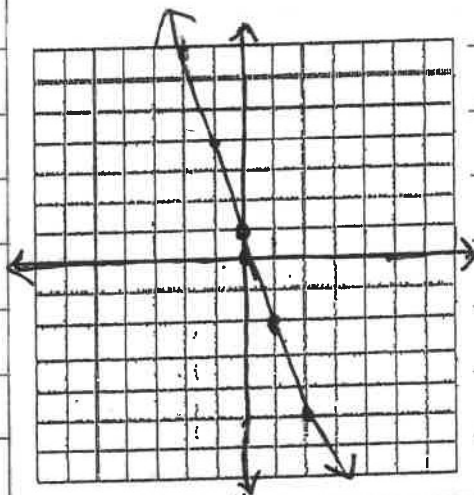
4 Simple steps to graph:

- ① make sure the equation is in slope-intercept form. (if not solve for y) $y = mx + b$
- ② Plot your first point on the y -axis using the y -intercept
- ③ Use rise over run to graph the next point.
 $\hat{=}$ start from the y -intercept.
- ④ Connect points to form a straight line.

Ex 1: $y = -3x + 1$

$$m = -\frac{3}{1}$$

$$b = 1$$



Ex 2: $\frac{2x}{-2x} - \frac{3y}{-2x} = \frac{6}{-2x}$ Solve for "y"

$$-\frac{3y}{-2x} = \frac{2x + 6}{-2x}$$

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

$$m = \frac{2}{3}$$

$$b = -2$$

