

Graphing Slope-Intercept Form

$$y = mx + b$$

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

↑ slope

y-intercept

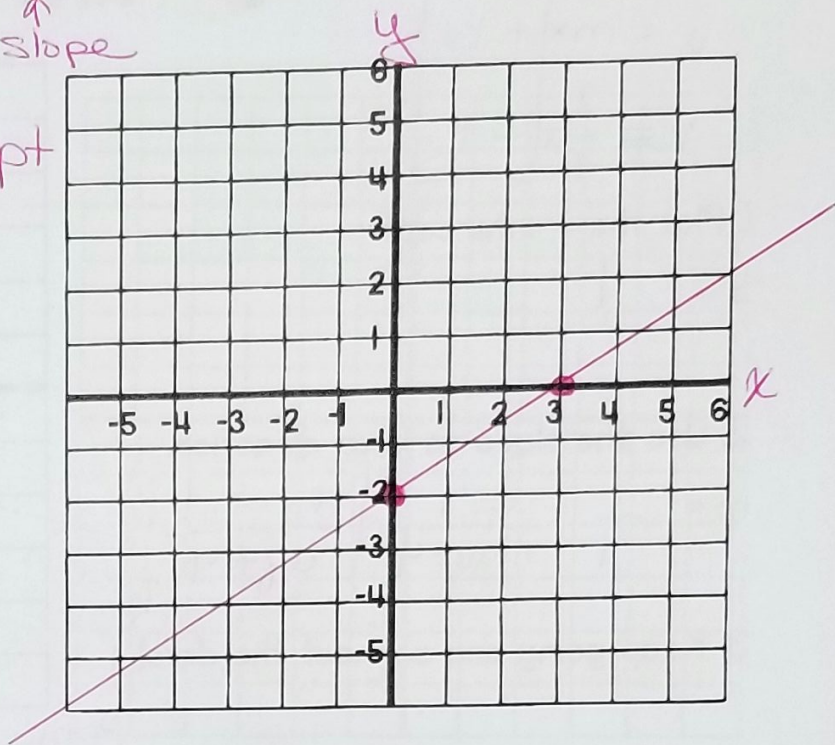
1. Plot the y-intercept

$$b = -2$$

2. Use the slope as your direction.

$$m = \frac{2}{3} = \frac{\text{rise}}{\text{run}}$$

3. Keep going and connect the dots!



$$y = mx + b$$

$$y = -\frac{1}{2}x + 4$$

1. Plot the y-intercept

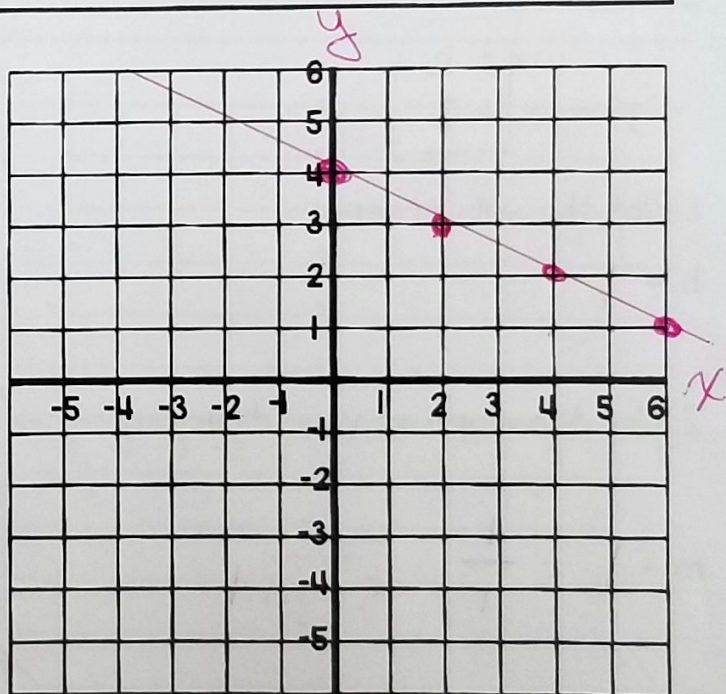
$$b = 4$$

2. Use the slope as your direction.

NEGATIVE --> DOWN

$$m = -\frac{1}{2} = \frac{\text{down 1}}{\text{run 2 right}}$$

3. Keep going and connect the dots!



Graphing Slope-Intercept Form

$$y = mx + b$$

$$y = mx + b$$
$$y = \frac{1}{4}x - 1$$

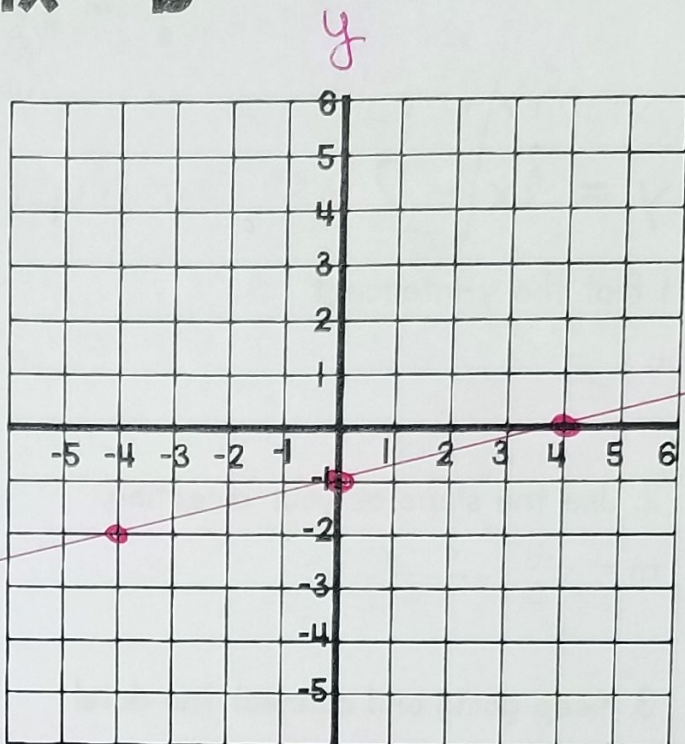
1. Plot the y-intercept

$$b = -1$$

2. Use the slope as your direction.

$$m = \frac{1}{4} \quad \begin{array}{l} \text{up 1} \\ \text{right 4} \end{array} \quad \begin{array}{l} \text{down 1} \\ \text{left 4} \end{array}$$

3. Keep going and connect the dots!



only if you can't fit on graph

$$y = mx + b$$
$$y = x + 1$$

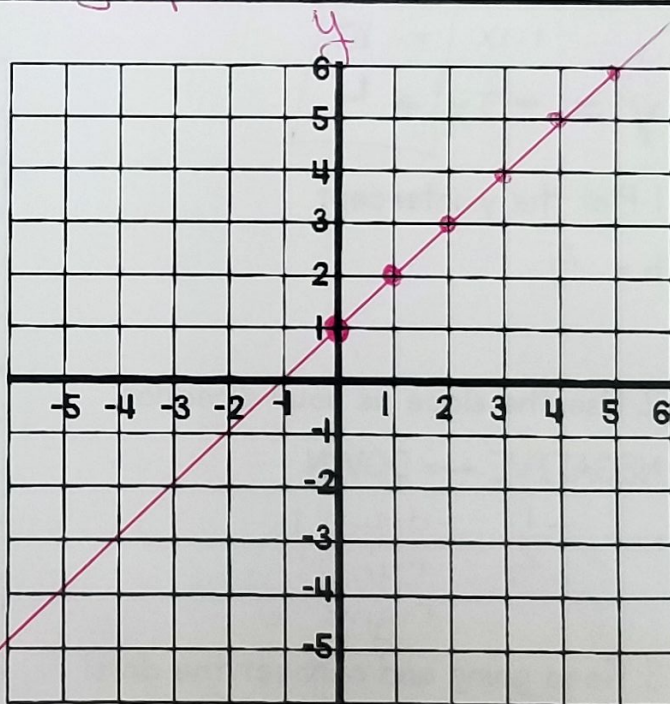
1. Plot the y-intercept

$$b = 1$$

2. Use the slope as your direction.

$$m = 1 = \frac{1}{1} \quad \begin{array}{l} \text{up 1} \\ \text{right 1} \end{array}$$

3. Keep going and connect the dots!



Graphing Slope-Intercept Form

$$y = mx + b$$

$$y = 4 \text{ horizontal line}$$

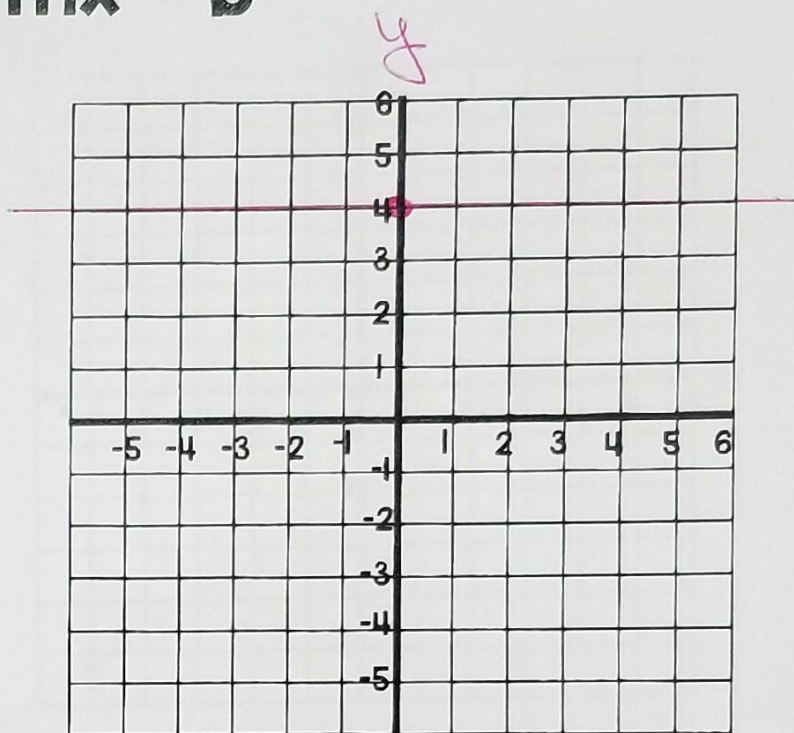
1. Plot the y-intercept

$$b = 4$$

2. Use the slope as your direction.

$$m = 0$$

3. Keep going and connect the dots!



$$x = -5 \text{ vertical line}$$

1. Plot the y-intercept

$$b = \text{none}$$

2. Use the slope as your direction.

$$m = \text{undefined}$$

3. Keep going and connect the dots!

