

Graphing Lines

you ultimately need
2 points to graph
a line.

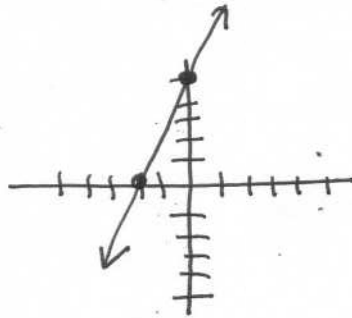
Intercept Method

- ① Find x-intercept (let $y=0$)
- ② Find y-intercept (let $x=0$)
- ③ Find a third point (if desired)

Example

Graph $5x - 2y = -10$

x	y
0	5
-2	0



Slope - Intercept method

- ① solve the equation for y
- ② Identify the slope & y-intercept
- ③ Plot the y-intercept. (starting point)
- ④ use the slope to plot more points

Example

Graph $5x - 2y = -10$

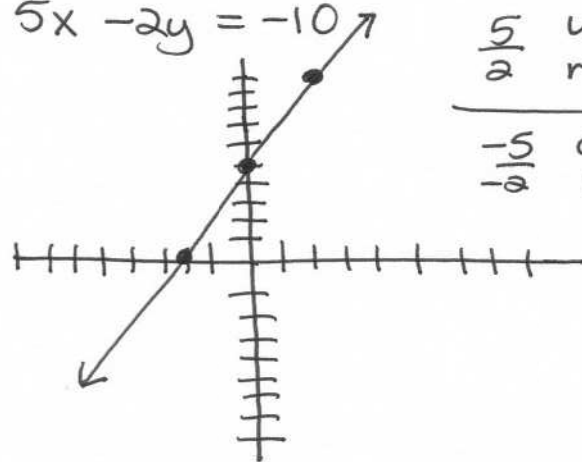
$$5x - 2y = -10$$

$$-2y = -5x - 10$$

$$y = \frac{-5x}{-2} - \frac{10}{-2}$$

$$y = \left(\frac{5}{2}\right)x + 5$$

$$m = \frac{5}{2} = \frac{-5}{-2} \quad (0, 5)$$



$\frac{5}{2}$ up
right

$\frac{-5}{-2}$ down
left