

# Homework Review - 4.5

Quiz!! 4.1 - 4.5, 4.7

Thursday, 10/13

Foldables -

Study / practice aid

Use on quiz (with approval)

NOT for use on test!!

Using two points to graph a line:

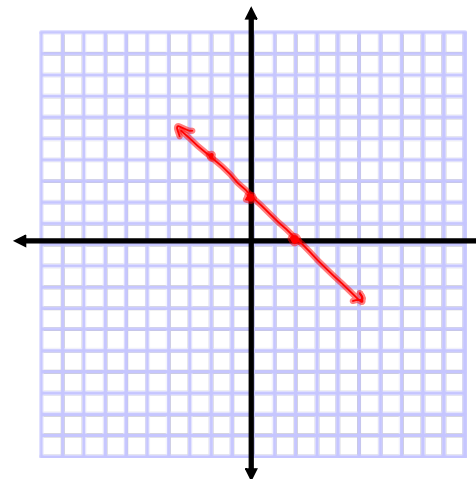
- ① Solve for  $y$
- ② Make a table—pick 2 or 3 values for  $x$  and calculate  $y$
- ③ Graph the points & connect

$$\begin{array}{rcl} 2x + 4y & = & 8 - 2x \\ -2x & & -2x \end{array}$$

$$\frac{4y}{4} = \frac{-4x + 8}{4}$$

$$y = -x + 2$$

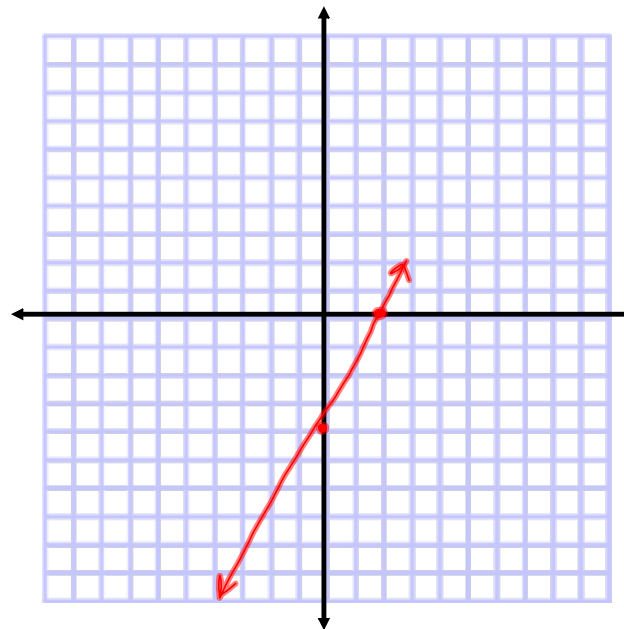
$x$	$y$
-2	4
0	2
2	0



Using x & y intercepts to graph a line:

- ① Set  $y=0$  and solve for  $x$  to find the x-intercept  $(x, 0)$
- ② Set  $x=0$  and solve for  $y$  to find the y-intercept  $(0, y)$
- ③ Graph the points & connect

$$\begin{aligned} 6x + -3y &= 12 \\ 6x + -3(0) &= 12 & (2, 0) \\ \frac{6x}{6} &= \frac{12}{6} \\ x &= 2 \end{aligned}$$
$$\begin{aligned} 6x + -3y &= 12 \\ 6(0) + -3y &= 12 & (0, -4) \\ -3y &= 12 \\ \frac{-3y}{-3} &= \frac{12}{-3} \\ y &= -4 \end{aligned}$$



Using slope-intercept form to graph a line:

- ① Solve the equation for  $y$  ( $y = mx + b$ )
- ② Plot the  $y$ -intercept  $(0, b)$
- ③ Use the slope ( $m = \frac{\text{rise}}{\text{run}}$ ) to find another point
- ④ Connect the points

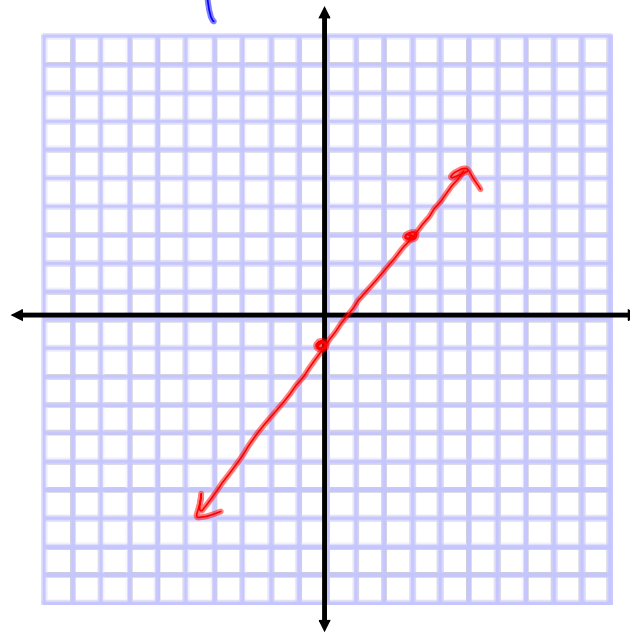
$$3y - 2x = -3 + 2x$$

$+2x \qquad +2x$

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

$$y = \frac{4}{3}x - 1$$

$$(0, -1)$$



$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

