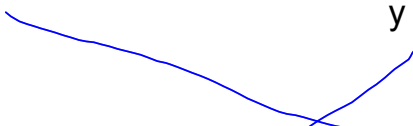
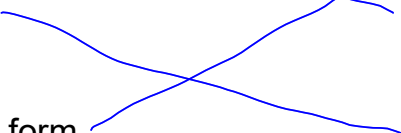



Bell Work:

*m = slope*

Copy on your own paper. Match each term with its equation.

Point-slope form		$y = mx + b$
Standard form		$y - y_1 = m(x - x_1)$
Slope-intercept form		$Ax + By = C$

Linear Functions and Slope-Intercept Form

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

Find the slope of the line through each pair of points. To start, substitute  $(x_1, y_1)$  and  $(x_2, y_2)$  into the slope formula.

1.  $(1, 6)$  and  $(8, -1)$ 

$$\frac{-1 - 6}{8 - 1}$$

$$\frac{-7}{7} = -1$$

$$\frac{6 - (-1)}{1 - 8}$$

$$\frac{7}{-7} = -1$$

3.  $(-2, 1)$  and  $(8, -3)$ 

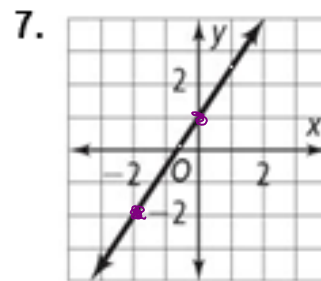
$$\frac{-3 - 1}{8 - (-2)} = \frac{-4}{10} = \frac{-2}{5}$$

$$\frac{1 - (-3)}{-2 - 8} = \frac{4}{-10} = \frac{2}{-5}$$

Write an equation for each line.

5.  $m = \frac{7}{2}$  and the y-intercept is  $-5$

$$y = \frac{7}{2}x - 5$$



$$y = \frac{3}{2}x + 1$$

$$y = mx + b$$

Write each equation in slope-intercept form. Then find the slope and y-intercept of each line. To start, isolate the y-term on one side of the equation.

9.  $-5y + 2 = -7x$

$$-5y = -7x - 2$$

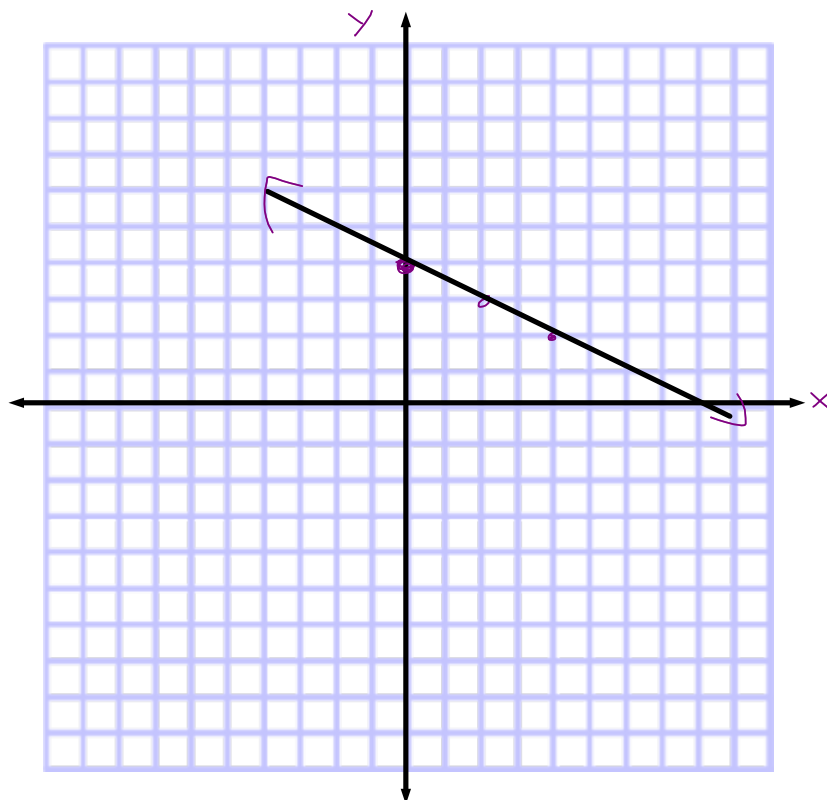
$$y = \frac{7}{5}x + \frac{2}{5}$$

$$m = \frac{7}{5}$$

$$y\text{-int} = \frac{2}{5}$$

Graph each equation.

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

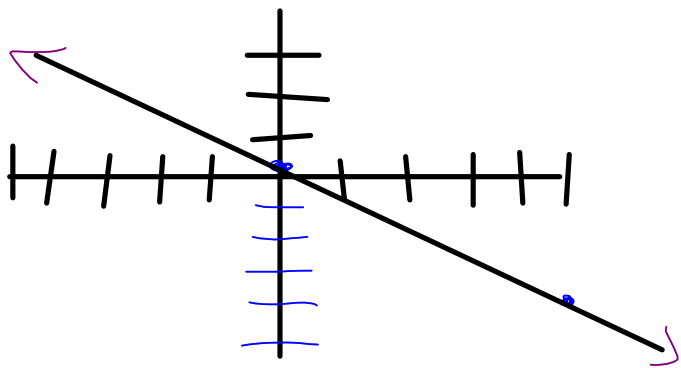


Graph each equation. Find the slope and y-intercept.

15.  $5y + 4x = 1$

$$5y = -4x + 1$$

$$y = \underbrace{-\frac{4}{5}}_m x + \underbrace{\frac{1}{5}}_{y\text{-int}}$$



$$17. \left( \frac{x}{4} + \frac{y}{8} = \frac{3}{16} \right) 16$$

$$\frac{16x}{4} + \frac{16y}{8} = \frac{48}{16}$$

$$4x + 2y = 3$$

$$2y = -4x + 3$$

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

