

# Graphing Lines Slope-Intercept Form

## Overview of Problems



*Example Set: A*

Write the equation of the line in slope-intercept form  
(hint: solve for y)

$$-2x + 5y = 20$$

$$6x - 2y = -12$$



*Example Set: B*

Identify the slope and y-intercept from the equation

$$y = 3x + 1$$

$$y = \frac{1}{2}x - 6$$

$$2y = -8x + 1$$

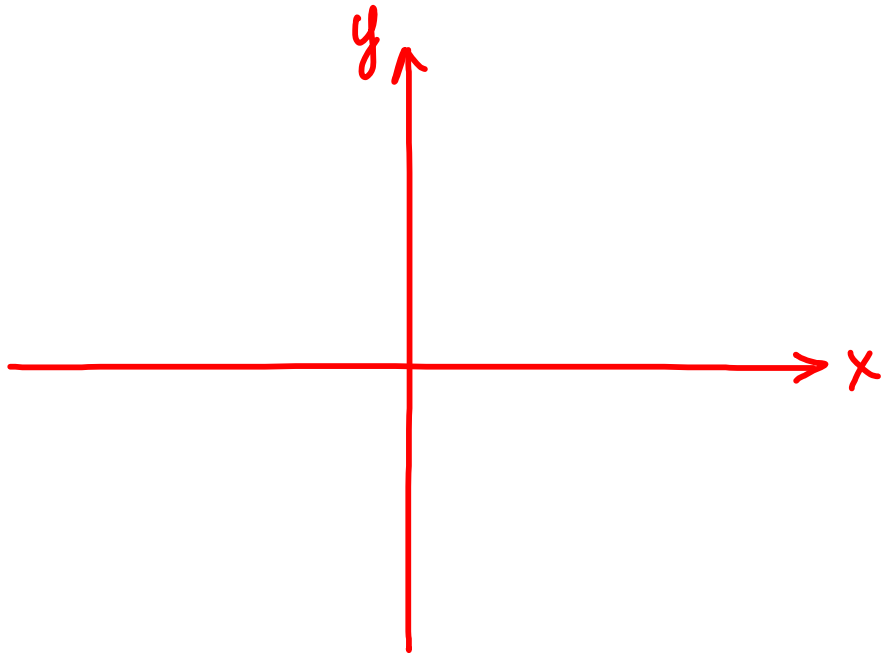
$$3x - 2y = 9$$



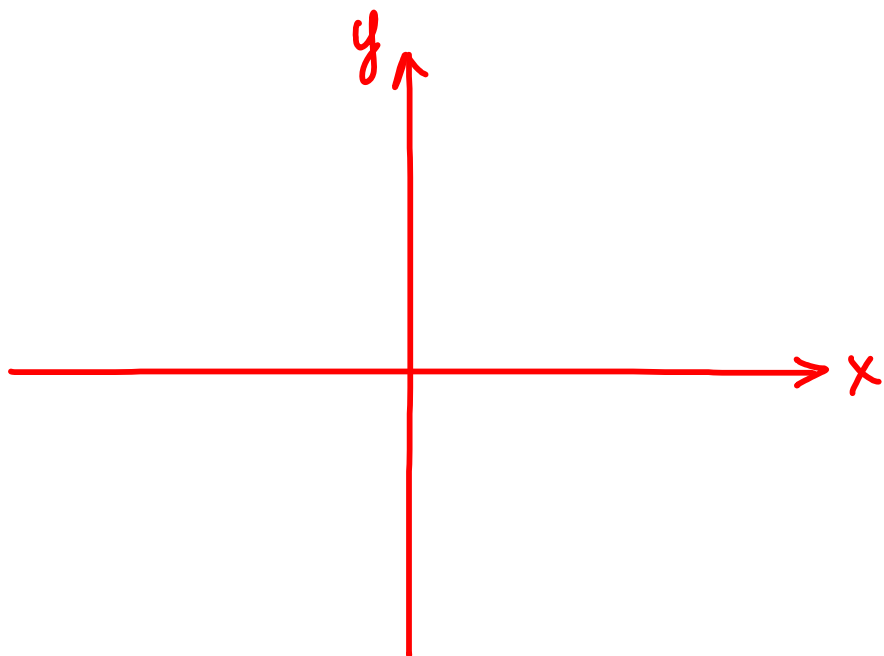
## Example Set: C

Use the slope-intercept form to graph the line

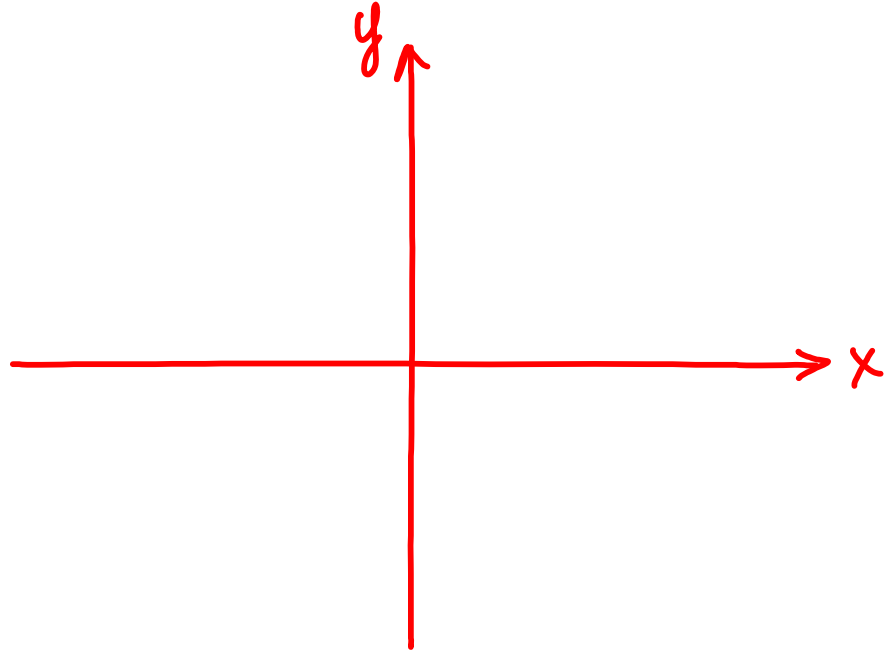
$$y = \frac{3}{4}x + 5$$



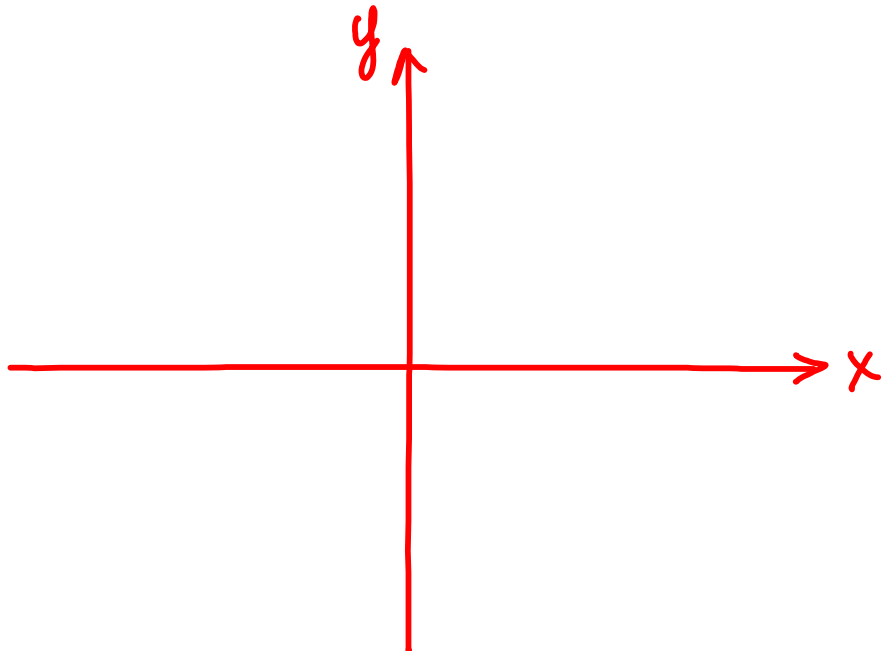
$$y = -\frac{1}{3}x + 10$$



$$y = \frac{2}{5}x - 3$$



$$y = -2x + 9$$



# Graphing Lines Slope-Intercept Form

## Overview of Problems- KEY



Example Set: A

Write the equation of the line in slope-intercept form  
(hint: solve for y)

$$-2x + 5y = 20$$

$$y = \frac{2}{5}x + 4$$

$$6x - 2y = -12$$

$$y = 3x + 6$$



Example Set: B

Identify the slope and y-intercept from the equation

$$y = 3x + 1$$

$$m = 3 \quad y\text{-int} = 1$$

$$y = \frac{1}{2}x - 6$$

$$m = \frac{1}{2} \quad y\text{-int} = -6$$

$$2y = -8x + 1$$

$$m = -4 \quad y\text{-int} = \frac{1}{2}$$

$$3x - 2y = 9$$

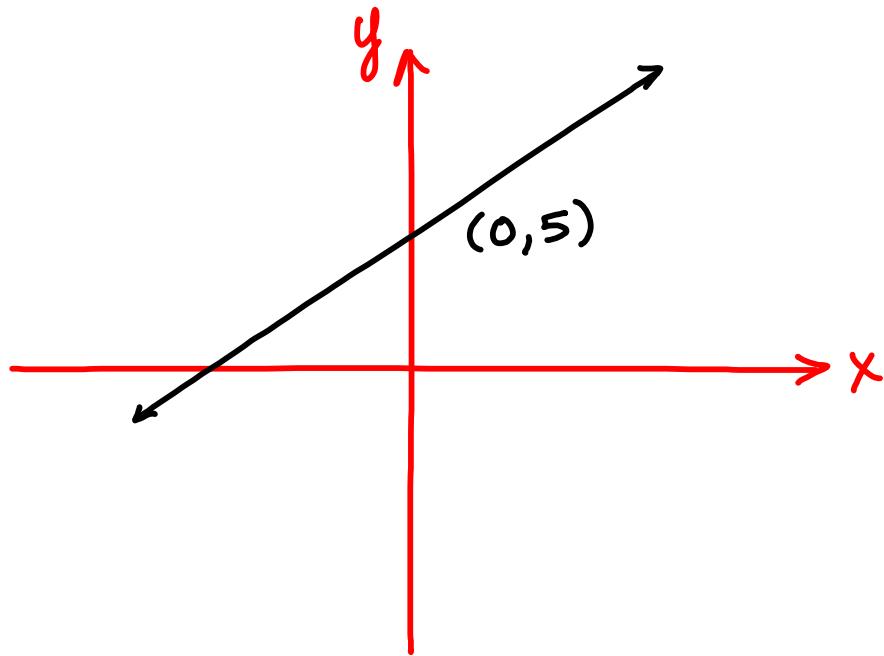
$$m = \frac{3}{2} \quad y\text{-int} = -\frac{9}{2}$$



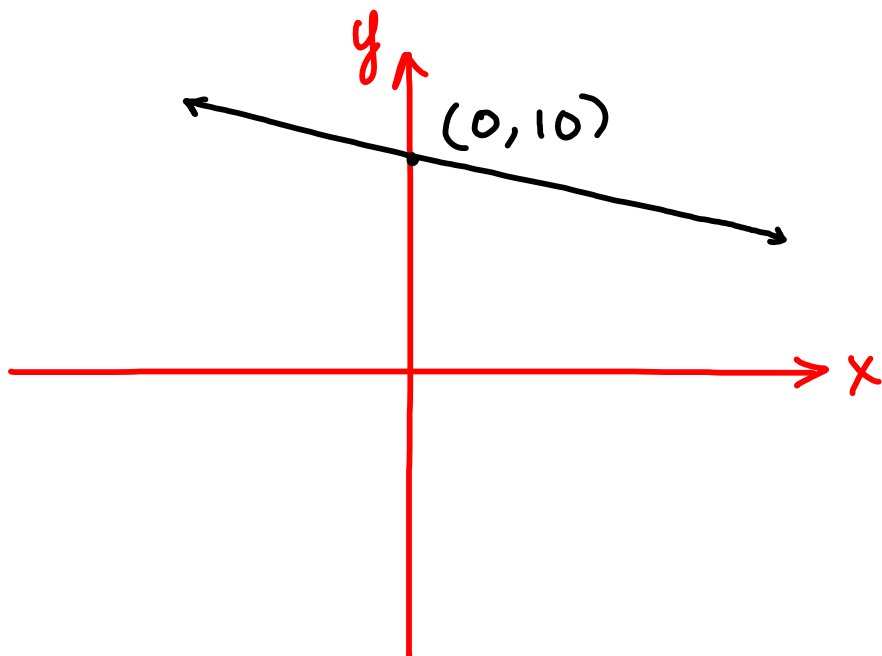
## Example Set: C

Use the slope-intercept form to graph the line

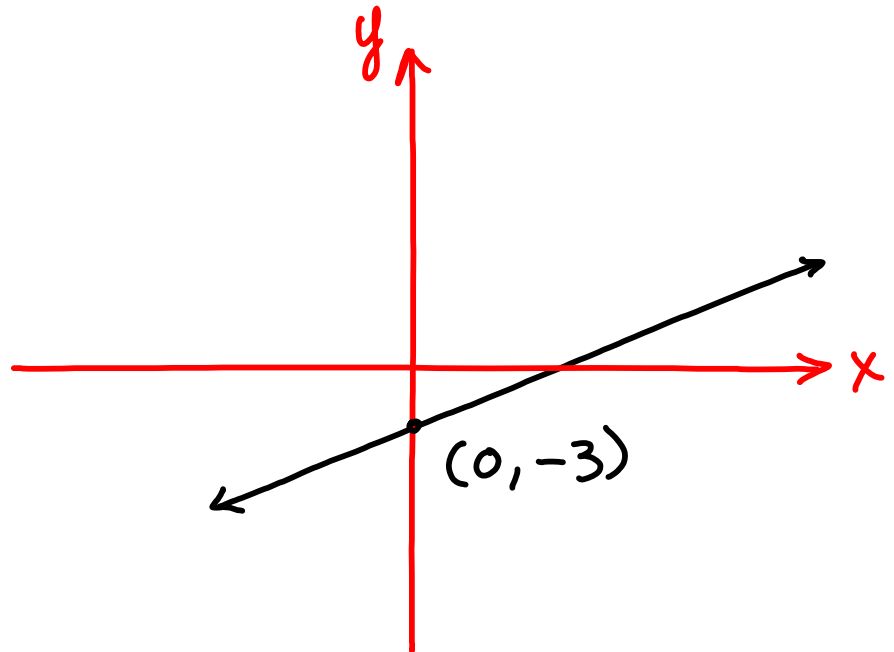
$$y = \frac{3}{4}x + 5$$



$$y = -\frac{1}{3}x + 10$$



$$y = \frac{2}{5}x - 3$$



$$y = -2x + 9$$

