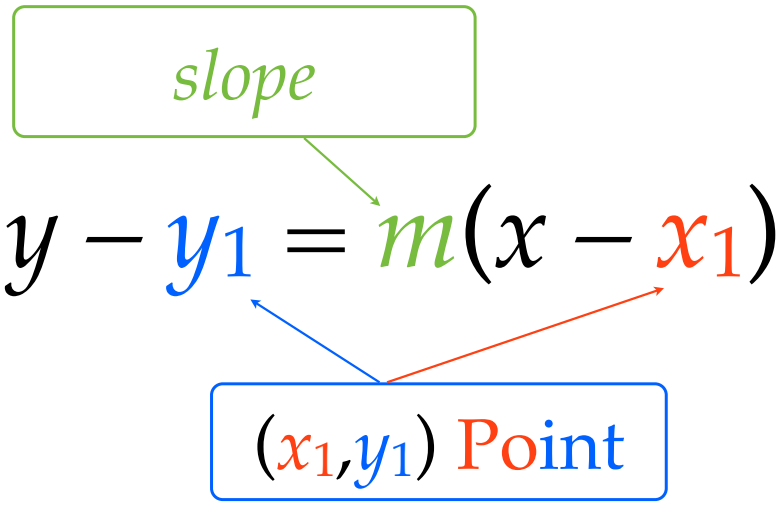
Name _____

Writing Linear Equations in Point-Slope Form

Date _____ Period _____

Point-Slope Form of a Line



Determine the given (x,y) point and slope from the following equations

$$y - y_1 = m(x - x_1)$$

$y - 5 = 3(x - 4)$ $y + 1 = -4(x + 3)$ $y + 2 = -(x - 8)$

Determine the given (x,y) point and slope from the following equations

$$y - y_1 = m(x - x_1)$$

$y - 2 = \frac{1}{3}(x - 6)$ $\quad$ $y + 2 = (x - 7)$ $\quad$ $y - 4 = -4x$

Given the (x,y) point and slope, write the following lines in point-slope form.

$$y - y_1 = m(x - x_1)$$

(x,y) Point: (4,5)
Slope, m: -4

(x,y) Point: (-1,6)
Slope, m: 2

(x,y) Point: (-3,-5)
Slope, m: -1

Given the (x,y) point and slope, write the following lines in point-slope form.

$$y - y_1 = m(x - x_1)$$

Then solve for y to put equation in slope-intercept form.

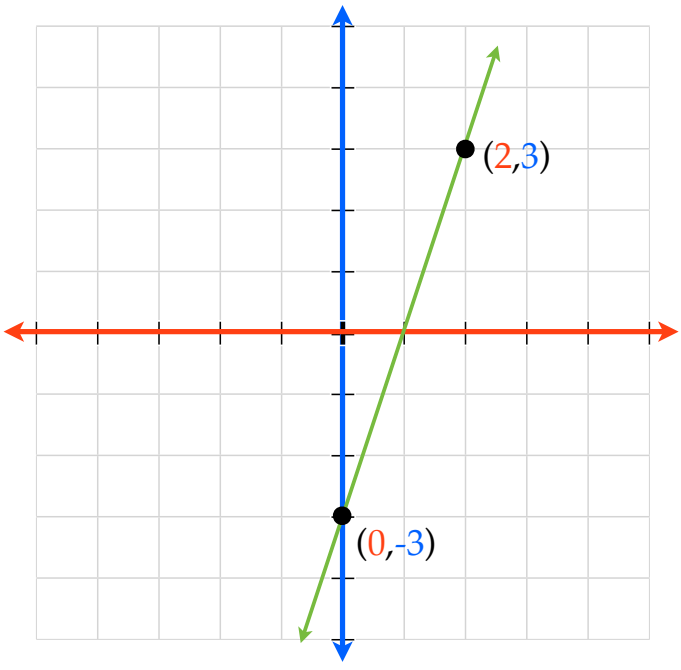
(x,y) Point: (2,4)
Slope, m: 3

(x,y) Point: (8,-3)
Slope, m: -1

Write the following lines in point-slope form

$$y - y_1 = m(x - x_1)$$

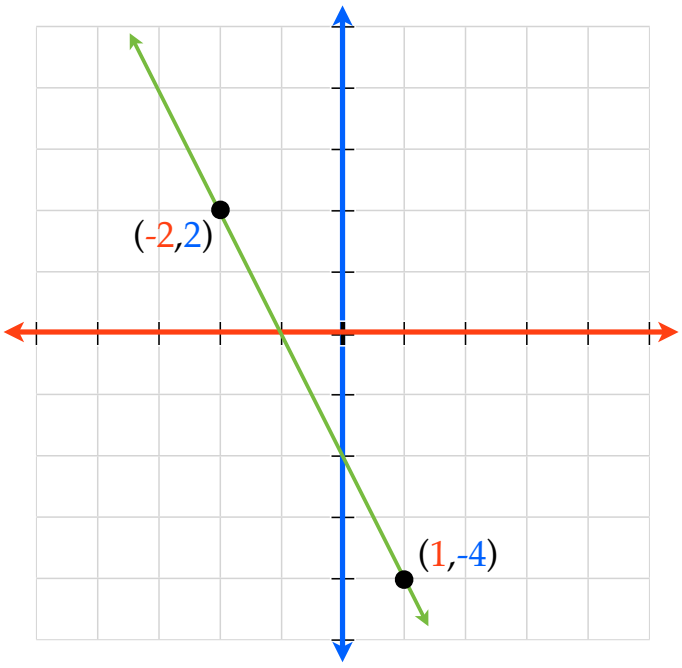
(x,y) Point Slope, m



Write the following lines in point-slope form

$$y - y_1 = m(x - x_1)$$

(x,y) Point Slope, m



Point-Slope Form of a Line

$$y - y_1 = m(x - x_1)$$

slope

(x_1,y_1) Point