## Point-Slope Form of a Line

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

$$(x_1, y_1) \text{ Point}$$

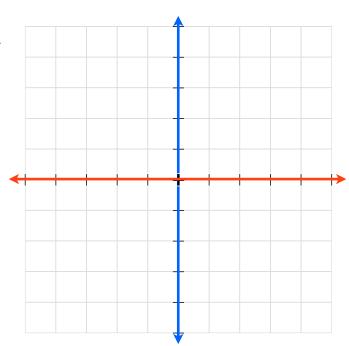
Graph the following lines in point-slope form

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

$$y - 2 = -2(x - 1)$$

(x,y) Point

Slope, m



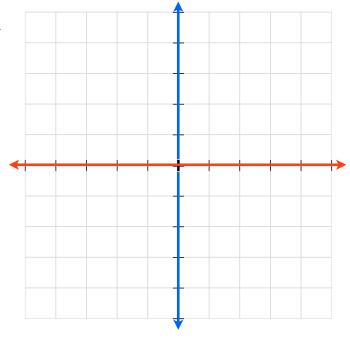
Graph the following lines in point-slope form

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

$$y + 4 = \frac{1}{3}(x + 2)$$

(x,y) Point

Slope, m



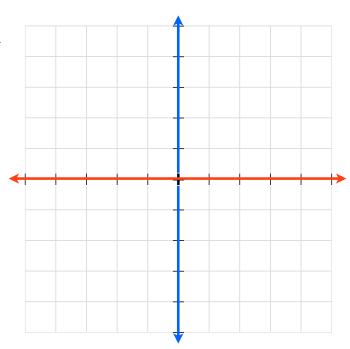
Graph the following lines in point-slope form

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

$$y + 1 = 2(x + 2)$$

(x,y) Point

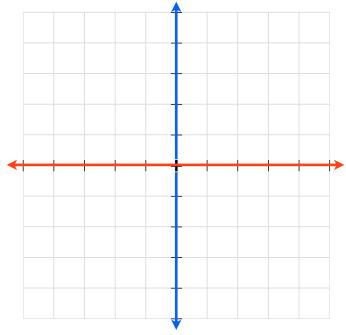
Slope, m



Graph the following lines in point-slope form

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

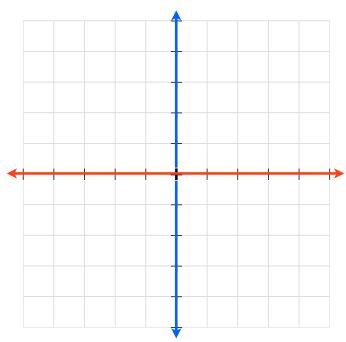
$$y+1=2(x+2)$$



Graph the following lines in point-slope form

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

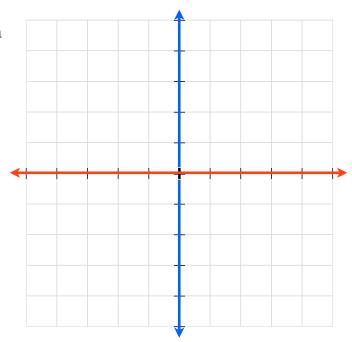
$$y - 3 = -\frac{1}{4}(x + 4)$$



Graph the following lines in point-slope form

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

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



## Point-Slope Form of a Line

$$(x_1,y_1)$$
 Point

slope

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

Start at the given (x,y) Point

From the (x,y) Point, apply the slope

Solve for *y* to put equation in slope-intercept form