

8.4 Slope of a line

Name _____

- Slope Intercept Form of a Line

$$y = mx + b$$

- Slope

$$m = \frac{\text{rise}}{\text{run}} = \frac{\text{change in } y}{\text{change in } x}$$

(3,5) and (-1,1)

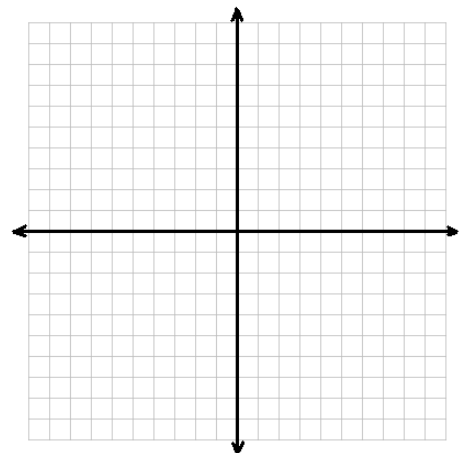
(-4,-2) and (4,2)

horizontal lines

vertical lines

Average rate of change

$$3x - 4y = -8$$



Point-slope form of a line

Given a point and a slope graph the line and come up with the equation of the line

$$(-1, 6) \quad m = \frac{5}{2}$$

$$(-2, -5) \quad m = -3$$

REMEMBER!!!

*** $1x = x$ *** slope is 1!

$$*** \frac{a}{b} = \frac{-a}{b} = \frac{a}{-b} ***$$