4.2 Writing Equations in Point-Slope form

Do Now: Write a linear function with the values $f(6) = -5$ and $f(-4) = 23$

Lets rewrite our slope formula.

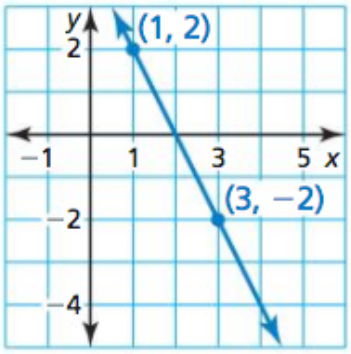
$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Point Slope From (Core Concept)

$$Y - y_1 = m(X - x_1)$$

Example 1: Write an equation in point-slope form of the line that passes through the point (-8 , 3) and has a slope of ¼

Example 2: Write an equation in slope-intercept form of the line shown.



Example 3: Write a linear function with the values $f(4) = -2$ and $f(8) = 4$

Example 4: Modeling with mathematics

The student council is ordering customized foam hands to promote school spirit. The table shows the cost of ordering different numbers of foam hands. Can the situation be modeled by a linear equation? Explain. If possible, write a linear model that represents the cost as a function of the number of foam hands.

Number of foam hands	4	6	8	10	12
Cost (dollars)	34	46	58	70	82

Homework / Classwork
3, 5, 11, 13, 17, 19, 23, 25, 28, 34