

# Slope (Math 7 Plus)

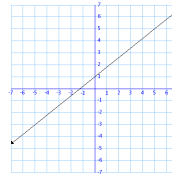
Slope: The term that describes the slant of a line.

$$y = mx + b$$

$$\text{slope} = m = \frac{\text{vertical change}}{\text{horizontal change}} = \frac{\text{rise}}{\text{run}} = \frac{\Delta y}{\Delta x}$$

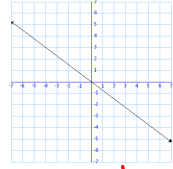
Types of slope:

Positive



Slant goes up from left to right.

Negative

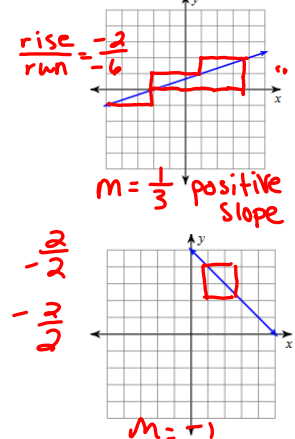
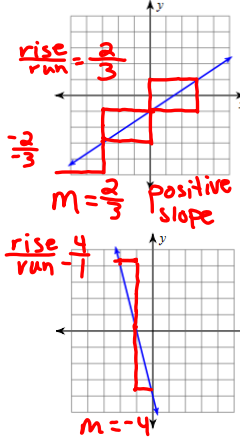


Slant goes down from left to right.

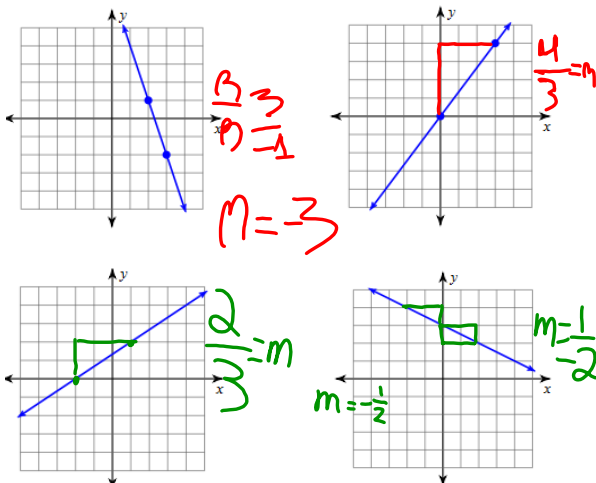
Finding slope from a graph:

1. Find two points
2. Count number of spaces up(positive) or down(negative). This will be your rise.
3. Count number of space right(positive) or left(negative). This will be your run.

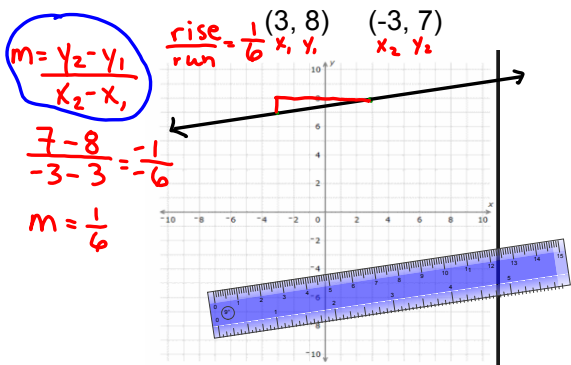
Find the slope of a line:



Your turn: Find the slope of the line



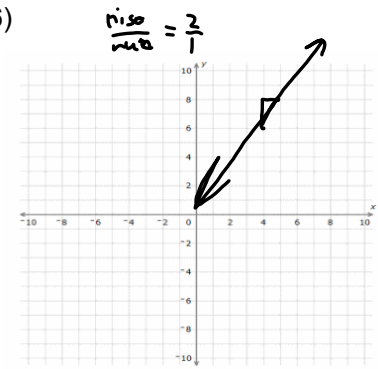
Find the slope:



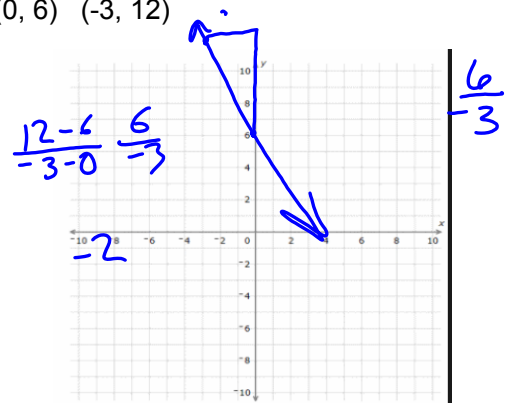
(6, -10) (7, 4)



(5, 8) (4, 6)



(0, 6) (-3, 12)



When given two points, you can also use a formula to find slope:

$$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{\text{change in vertical}}{\text{change in horizontal}}$$