

# 5.5: Slope of a Line

1/9 p. 2

EQ.: How do we find the slope of a line?  
What does slope tell us about rate of change?

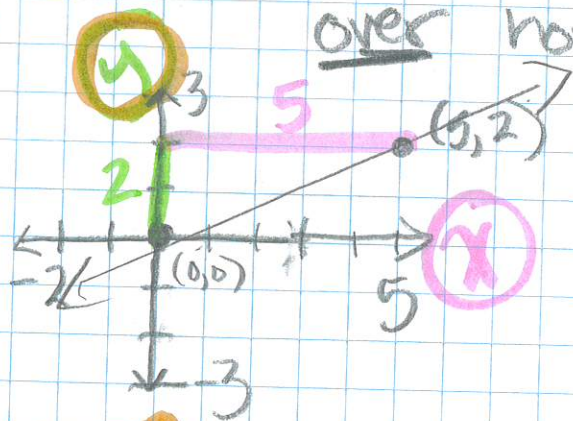
slope: steepness of a line on a graph.

\* Defined as

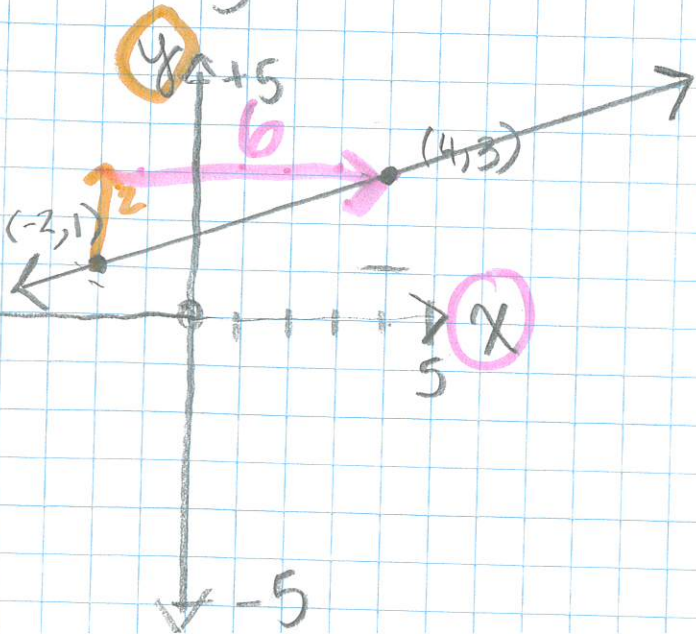
$$\frac{\text{Change in } x}{\text{Change in } y}$$

\* The bigger the (#), the steeper the slope

\* Ratio of how much the graph goes  $\updownarrow$   
over how much graph goes  $\leftrightarrow$



Slope:  $\frac{\updownarrow}{\leftrightarrow} = \frac{2}{5}$



Slope =  $\frac{2}{6} = \frac{2}{2} = \frac{1}{3}$

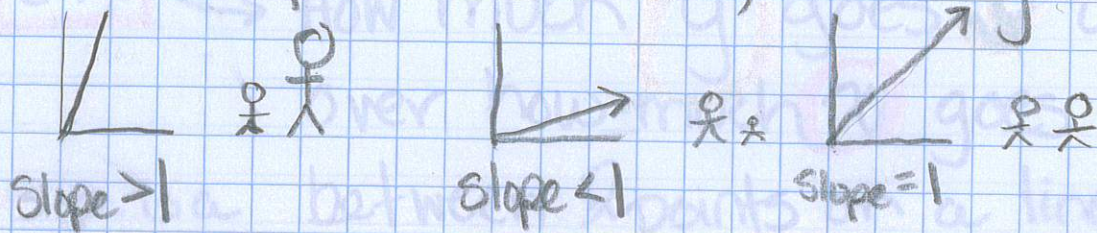
## 5.5: Slope

E.Q.: How do we find the slope of a line?  
What can we learn by comparing slopes?

\* SLOPE: steepness of a line on a graph.

\* definition:  $\frac{\text{Change in } y}{\text{Change in } x}$

\* the bigger the # of the slope, the steeper the line, the higher the rate.



\* ratio of how much  $y$   $\updownarrow$  over how much  $x$   $\leftrightarrow$   
 $\hookrightarrow$  (looks like a fraction)

## 5.5: Slope

1/9  
p.7

- E.Q.: How can we find ~~sto~~ the slope of a line from a graph? What can we tell from the slope?

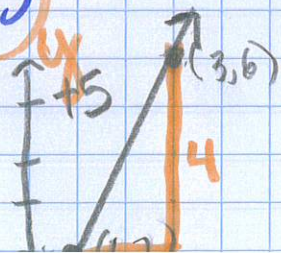
\* slope: the change in  $y$  over the change in  $x$  between 2 points on a graph.

\* OR → How much  $y$  goes  $\updownarrow$  up or down over how much  $x$  goes  $\leftrightarrow$  left or right.

● slope is a ratio between 2 points on a line.

\* ratio:  $\frac{\text{how much } y \text{ changes}}{\text{how much } x \text{ changes}}$  over

$y$  is always on TOP



$$\text{SLOPE } \frac{4}{2} = \frac{2}{1} = 2$$