

Slope as a Rate of Change - Notes

Rate of Change or Slope = $\frac{\text{change in distance}}{\text{change in time}}$

Example1- Mary ran 5000m in 5 minutes. Her rate of change would be $5000\text{m} \div 5\text{min} = 1000\text{m/min}$

Slope is the rate of change -
It represents a change in one item relative to another.

Example 2 - Your cell phone bill increases the more you text. two items (variables) - # of texts and cost of your bill.

Example 2 - A cell phone company charges \$ 0.15 for every text. Create a table of values to compare cell phone bills

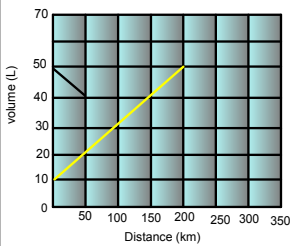
# of Texts	Total Cost	Rate of Change
0	0	$\$ 0.15 - 0 = 0.15$
1	\$ 0.15	$\$ 0.30 - \$0.15 = 0.15$
2	\$ 0.30	$\$ 0.45 - 0.30 = 0.15$
3	\$ 0.45	

The Rate of Change or Slope is \$ 0.15

Mar 15-11:42 AM

Oct 26-1:53 PM

3) Calculate the rate of change or slope of the graph below.



Rate of Change or Slope = $\frac{\text{change in volume}}{\text{change in time}}$

4) Sally runs each morning, yesterday she ran 5 km in 30 minutes. Calculate the rate of change for Sally's run ?

5) A airplane taking off elevates 3000km in 10minutes. Determine the rate of change?

Oct 23-3:48 PM

Apr 25-1:16 PM

Assignment
Handout - Rate of Change

Mar 15-12:20 PM

Mar 17-12:26 AM