Adv Alg

th 12/1/16

How do I find the rate of change (roc)?

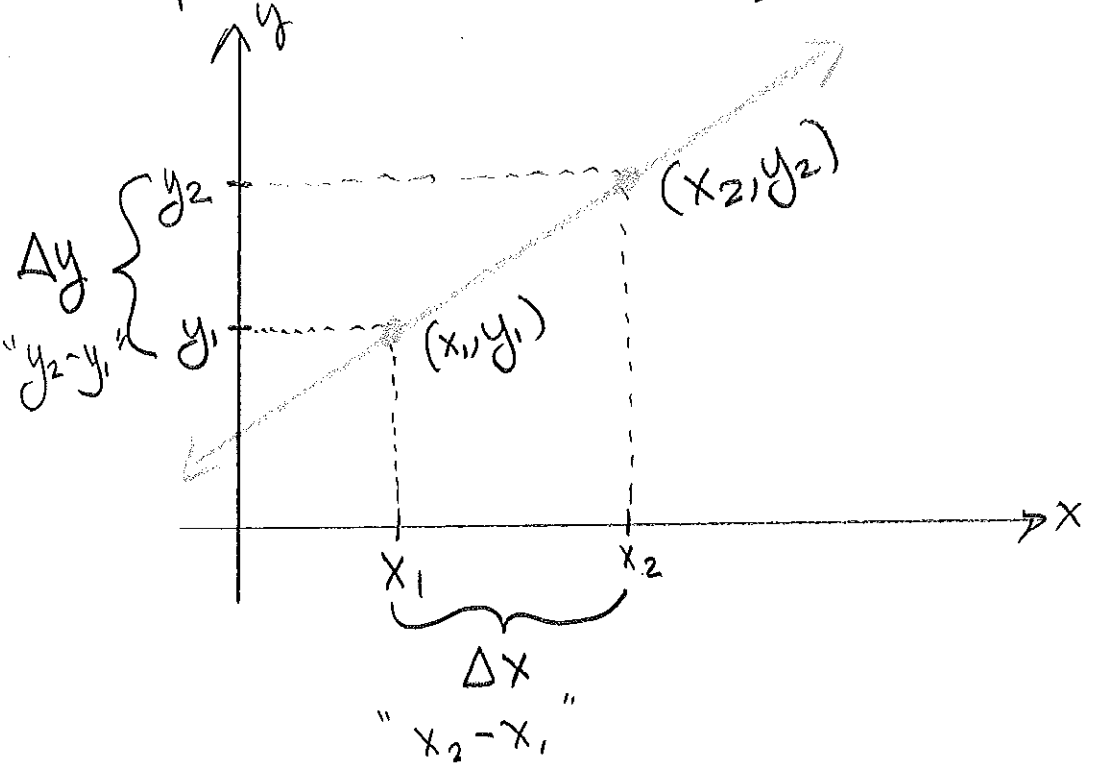
Recall the eqn of a line:

$y = mx + b$ → y intercept / starting point

↳ slope

"Δ" delta which means "change in"

$$\text{Slope} = m = \frac{\text{rise}}{\text{run}} = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1} = \text{roc}$$



A line has a constant slope meaning that the slope is the same over the entire graph/fxn.

When/Why do we use slope vs. roc?

slope may not have units

roc is applied, so usually has units (i.e. ft/s, $/yr, miles/hr)

∴ roc is used for real-life scenarios that can be modeled by $y = mx + b$

Determine independent vs dependent variables

I	D
yrs	$
hrs	miles

units for roc is $\frac{\text{dependent variable}}{\text{independent variable}}$.