

Definition:
Steepness of a Line.
Ratio of $\frac{\text{rise}}{\text{run}}$

Classify Slopes:

positive

negative

zero

undefined

Slope
is

$m = \frac{\text{rise}}{\text{run}}$

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

Slope from a Graph:

Slope from a Formula:

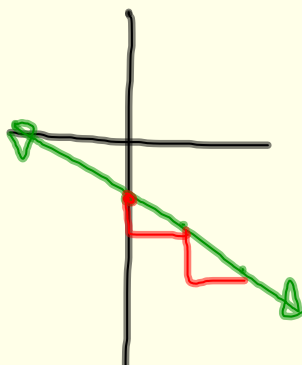
Graphing Lines

T of V

x	y
3	-1
2	-2
0	-2
-2	-2

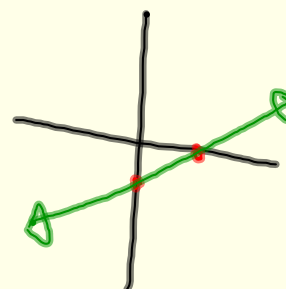
$$y = mx + b$$

use m and b
to graph



x and y int.

x	y
0	0
0	0



Determine Equation of a Line

Need to Know: slope and y-int

Find Slope

Given slope

Given two points

Given graph

Given a // or \perp Line

Find y-int

Given y-int (0,y)

Sub m and a Pt
into $y = mx + b$

Final Eq'n

$$y = mx + b$$

or

$$Ax + By + C = 0$$

Parallel & Perpendicular Lines

Slopes are
equal

Slopes are
negative reciprocals