FIND SLOPE: TABLE OF VALUES & EQUATION

A ***TABLE OF VALUES*** is a table used to record the _____ of points in a relation.

A ***RELATION*** is a pattern that connects two sets of data (_____). (x,y)

A ***LINEAR RELATION*** is a _____.

SLOPE is the _____ of one point on a line in relation to another point.

TO FIND SLOPE USING A TOV…

We look at the unit change in one value ("***x***") in relation to the unit change in a second ("***y***") value.
(as "***x***" increases, we can find how much "***y***" changes)

RATE OF CHANGE = **SLOPE** = m =

Example 1: Use a table of values to determine the slope for the relation.

x		Coordinates (x, y)	Rate of Change (**slope**)
0	$y = 3(\quad) + 1 =$	(,)	-----
1	$y = 3(\quad) + 1 =$	(,)	
2	$y = 3(\quad) + 1 =$	(,)	
3	$y = 3(\quad) + 1 =$	(,)	
4	$y = 3(\quad) + 1 =$	(,)	

If the ***slope*** is the ***same*** for all coordinates then the ***rate of change*** is ***constant*** → the line is ***straight***.

Example 2: Slope and the Coefficient of *x*

x		Coordinates (x, y)	Rate of Change (**slope**)
-1			-----
0			
1			
2			

COMPARE

Look at the **co-efficient of x** and the **rate of change.**

What do you notice?

Example 3: Find SLOPE using the TOV below

x	y
0	0
1	6
2	12
3	18
4	24
5	30

Example 4: Transform each equation into a y = mx + b equation. Then state the slope.

a) $y = -3x + 7$ b) $-2x + y = 6$ c) $y - 3x = 7x + 2$

ALL ABOUT SLOPE…

GIVEN:	GRAPH	TWO POINTS	TOV	EQUATION y = mx + b
USE:				

And remember… Leave SLOPE as a fraction, and always put in lowest terms!!!