Warm up!

Write a function rule for these tables.

Q1:

x	y
9	2
3	-2
-3	-6
-9	-10

Q2:

x	y
-2	-2
-1	2
0	6
1	10
2	14

Agenda

+ Homework Check

+ Lesson - Slope
(today and tomorrow)

+ Activity

+ Homework -

Word of the Day

In math, $\triangle$ means "change in"

This is the Greek letter ***delta***.

Example: $\dfrac{\triangle y}{\triangle x}$ means "change in y over change in x"

Topic: Linear Functions

Date: 11/9/15

EQ: How do I find the slope of a line?

Questions:

How do I find the slope of a line given a table?

SWBAT find the slope of a line given a graph, ordered pairs, or a table.

Remember this?!

$$f(x) = mx + b$$

today we're going to focus on the slope

Have you heard of <u>slope</u> before?

Where have you seen it?

Slope refers to the steepness of a line.

In our warm up, how did we find m for our function rule?

x	y
-2	-2
-1	2
0	6
1	10
2	14

What did we call this?

Slope uses Constant Change

$$\text{slope} = \frac{\text{change in y}}{\text{change in x}} = \frac{\triangle y}{\triangle x}$$

get this in your notes!

Example:

x	y
-2	-4
-1	-1
0	2
1	5
2	8

$$\text{slope} = \frac{\triangle\ ?}{\triangle\ ?}$$

Now let's look at ordered pairs.

{(-6, 4), (-4, 3), (-2, 2), (0, 1)}

How could we find the slope?

Tell a neighbor your ideas.

Try it!

Find the slope.

$\{(5, -1), (6, 6), (7, 13), (8, 20)\}$

Boss & Secretary

Table partners!

- Tells what to do
- Cannot write

- Only writes
- Cannot talk

Decide who's the boss!

Find the slope.

$\{(4, 1), (2, -1), (0, -3)\}$

(Remember to simplify!)

Now switch! Secretary becomes the boss!

Find the slope.

Data Table D: Temperature vs. Volume Data for a Gas Sample

Temperature (°C)	Volume of Gas (mL)
20	60
40	65
60	70
80	75
100	80
120	85

Switch back!

Find the slope.

(6, 12), (3, 13)

Switch! Last time!

Find the slope.

{(0, 9), (1, 14, (2, 19)}

Homework:

Book pg. 313-314

#10-15, 28, 30-32,
48-50, 63, 65, 72