

Agenda

Homework:

- AM
- Slope: Graphs & Tables WS

Materials:

- Notebook
- Calculator (if needed)

DO NOW:

- Take out homework
- Solve the following on your desk:
 1. What type of slope (**positive, negative, zero, undefined**) does the following line have?



2. Solve for x:
 $4x + 1 = 2x + 15$

Do Now

1. What type of slope
(**positive, negative,
zero, undefined**)
does the following
line have?



2. $4x + 1 = 2x + 15$

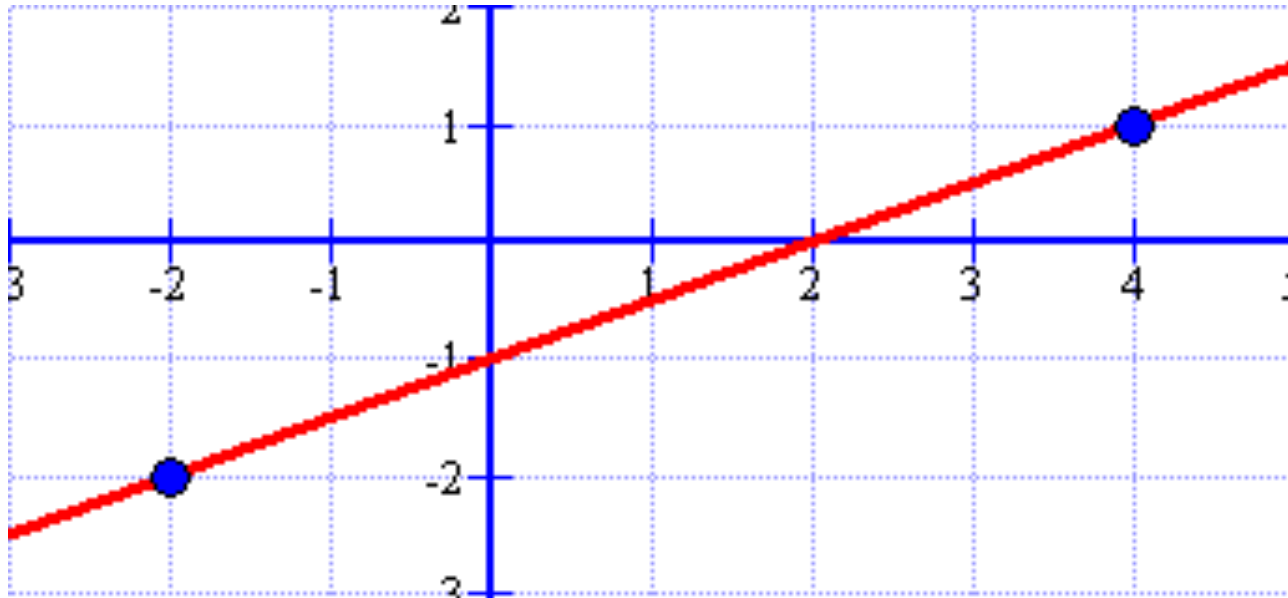
Set up Cornell Notes

- **Topic:** Slope – Graph & Tables
- **EQ:** How do you calculate slope given a graph?
How do you calculate slope given a table?

Update Table of Contents:

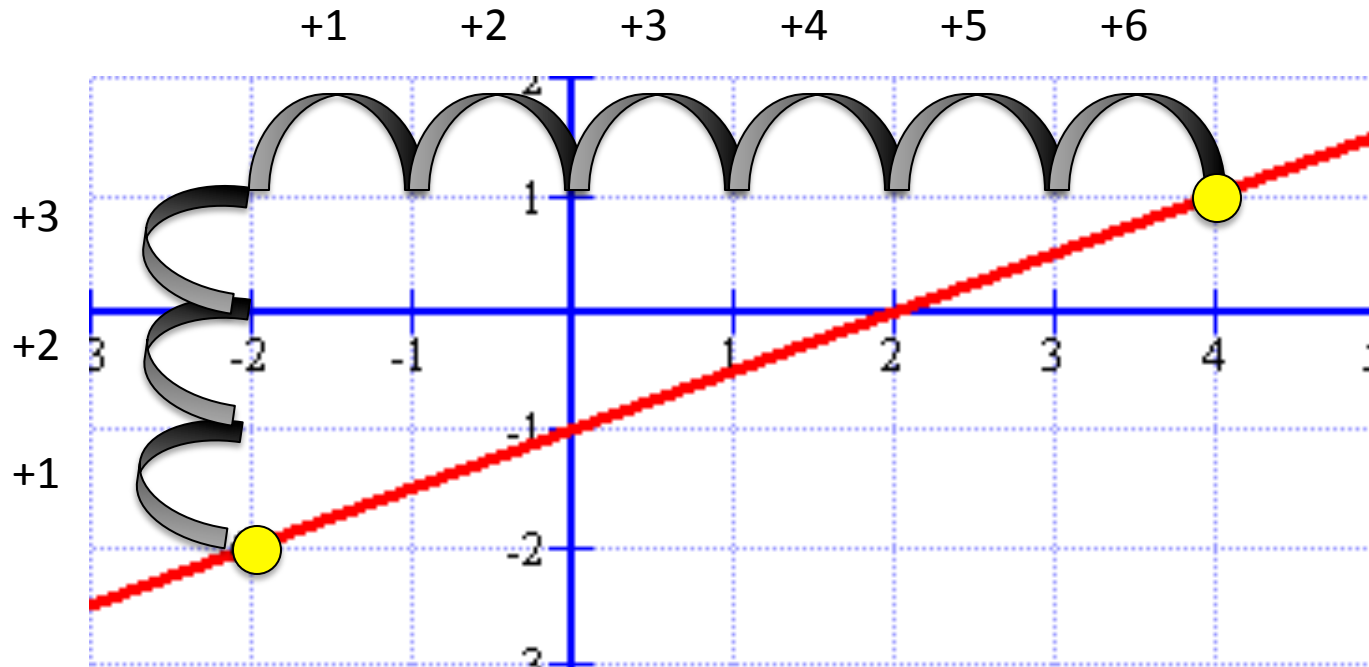
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How do you find the slope when given a graph?



When given the graph, we use the formula
“**rise over run**”

How do you find the slope when given a graph?



$$\frac{\textit{rise}}{\textit{run}} = \frac{+3}{+6} = \frac{\boxed{1}}{\boxed{2}}$$

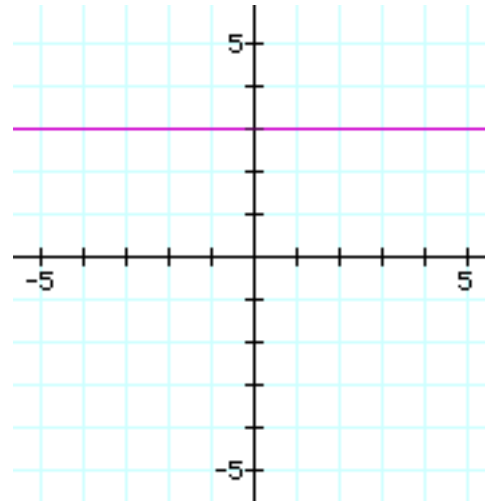
How do you determine if rise/run is positive or negative?



$$m = \frac{\text{rise}}{\text{run}} = \frac{3}{-2} = \frac{\text{move up } 3}{\text{move left } 2}$$

	Positive	Negative
RISE	Move UP	Move DOWN
RUN	Move RIGHT	Move LEFT

What is the slope of a horizontal line?

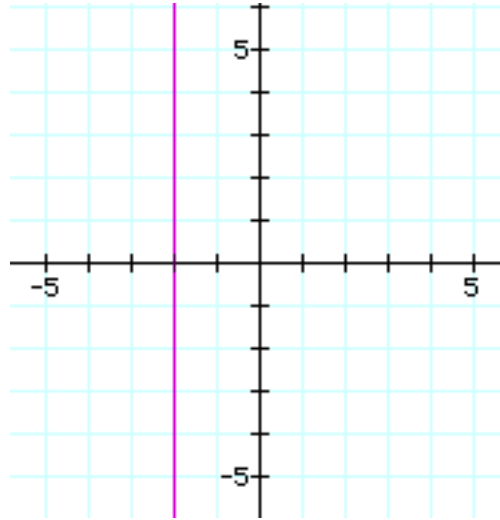


The line doesn't rise!

$$m = \frac{0}{\text{number}} = 0$$

All horizontal lines have a slope of 0.

What is the slope of a vertical line? 



The line doesn't run!

$$m = \frac{\textit{number}}{0} = \textit{undefined}$$

All vertical lines have an undefined slope.

Practice (left page of notes)

How do you find the slope given a table?

- When given a table, use the formula,

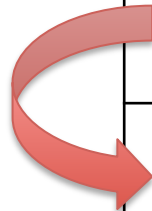
change in y

change in x

-1

+2

+2



x	y
2	5
4	4
6	3



-1

When is a fraction positive/negative?



- **Positive:** Numerator and denominator have the **SAME** sign

Negative: Numerator and denominator have **DIFFERENT** signs