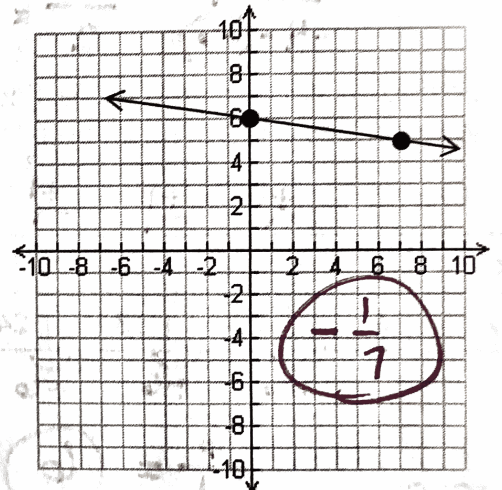
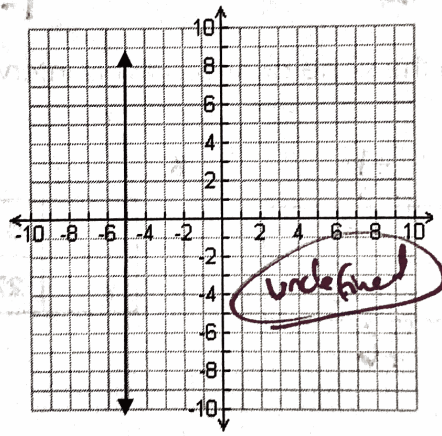
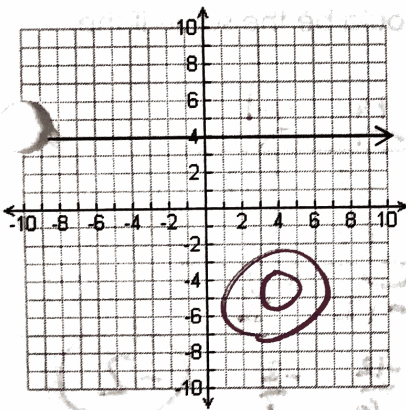
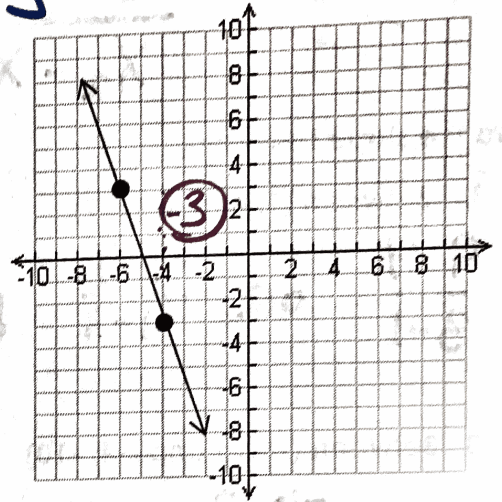
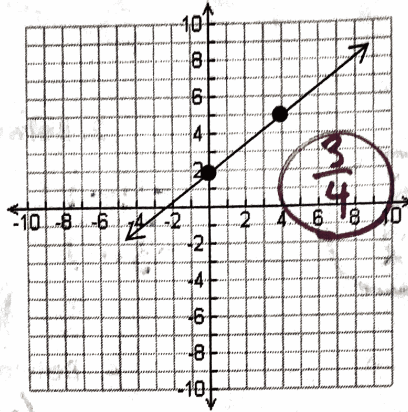
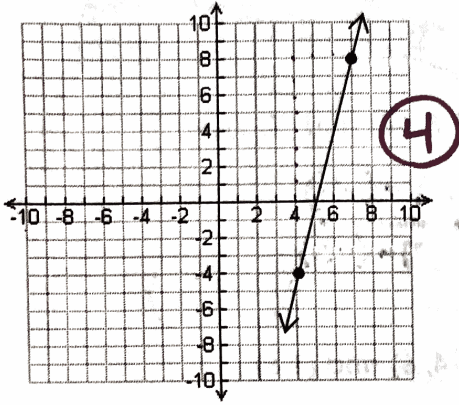


Slope Notes Day 2

Remember: A line has a constant rate of change that we call Slope

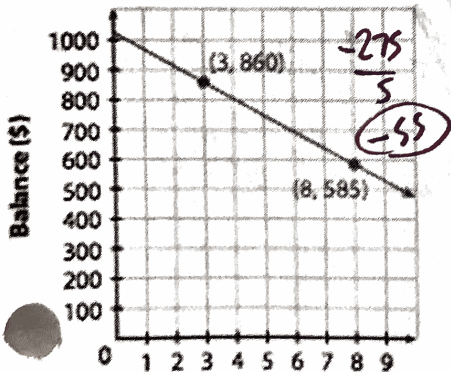
A line will have a positive slope when it is always increasing

A line will have a negative slope when it is always decreasing

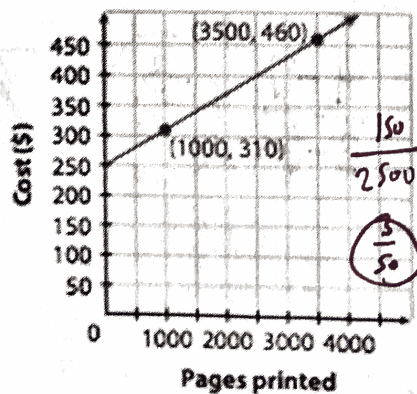


Find and interpret each slope-

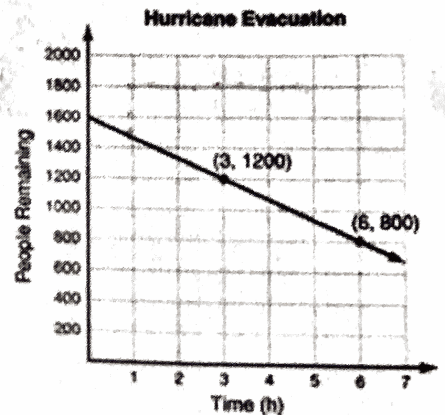
remember change in y is the numerator, change in x is the denominator.



every month the balance goes down \$55



every 50 pages costs \$3



$-\frac{400}{3}$

Finding the Slope between two points:

You can get the change in y by counting on a graph OR by subtracting the y-coordinates.

You can get the change in x by counting on the graph OR subtracting the x-coordinates.

Slope Formula:
$$\frac{y_2 - y_1}{x_2 - x_1}$$

Find the slope between

1. Between (1, 4) and (3, 9)

$$\frac{9-4}{3-1} \quad \text{OR} \quad \frac{4-9}{1-3} = \frac{5}{2}$$

2. Between (-3, -4) and (7, 1)

$$\frac{-4-1}{-3-7} \quad \text{OR} \quad \frac{1-(-4)}{7-(-3)} = \frac{5}{10} = \frac{1}{2}$$

3. Between (-6, 2) and (-4, -10)

$$\frac{-10-2}{-4-(-6)} = \frac{-12}{2} = -6$$

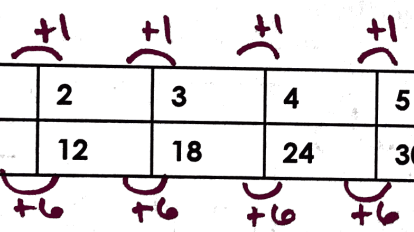
4. Between (-4, 6) and (1, 6)

$$\frac{6-6}{1-(-4)} = \frac{0}{5} = 0$$

When finding slope from a table, find the slope between every interval (its should be the same if the table describes a linear function.)

5.

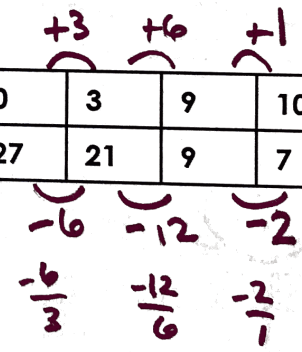
x	1	2	3	4	5
y	6	12	18	24	30



$$\frac{6}{1} = 6$$

6.

x	0	3	9	10
y	27	21	9	7

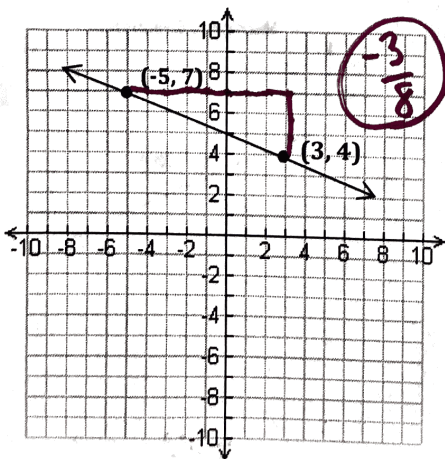


$$\frac{-6}{3} = -2$$

PRACTICE!

Find slope three different ways:

1.



2. (-5, 7) and (3, 4)

$$\frac{4-7}{3-(-5)} = \frac{-3}{8}$$

3.

x	5	10	15	20	25
y	-3	0	3	6	9