## Warmup 10/ (The tens and ones digit of Mr. Lischwe's new age)

*****You should have a regular whiteboard, graphing sheet, marker, and eraser in your desk!!!******

1) Use the slope formula to find the slope between the two points on the graph below.

$$
m=\frac{2-7}{-3-(-6)}=\frac{-5}{3}
$$

2) Check your answer for \#1 by using the "counting squares" method on the graph.

Down 5, right 3

$$
=-\frac{5}{3}
$$



## -DON'T FORGET TO

 CHECK IF IT'S A NEGATIVE SLOPE!!!
## By the way...

-Those formulas will NOT be on the board tomorrow during the quiz! You should know them!!!

## Go over Slope-Intercept WS

- This answer key will be posted on my website!!!


## Practice: WRITING in math

- Suppose you have a friend who does not know how to graph an equation in slope intercept form ( $\mathbf{y}=\mathrm{mx}+\mathrm{b}$ ). Write this friend a letter that explains the process. Your explanation should be specific enough that your friend would be able to follow it on different types of examples without asking any more questions.


## More slope practice

- For each problem:

1) Use the slope formula to find the slope on the regular whiteboard.
2) Plot the points on the graph and find the slope that way.
3) Compare. If you get different answers, try to figure out where you went wrong!

Find the slope between... 1. $(10,-7)$ and $(6,5)$

$$
m=\frac{5-(-7)}{6-10}=\frac{12}{-4}=-3
$$



## -DON'T FORGET TO

 CHECK IF IT'S A NEGATIVE SLOPE!!!
## Find the slope between...

 1. $(9,1)$ and $(1,-3)$


Positive!!!
Negative divided by negative is positive!!!

## Find the slope between...

 1. $(6,-5)$ and $(-2,-5)$
## Rate of Change Review

Anne and Robert have a lemonade stand. Is he making money at a constant rate? If so, what is that rate? If not, during which time periods did they make money the fastest and slowest?
(They started with negative profit because they spent money to make the lemonade!)

| Hour | Total Profit |
| :--- | :--- |
| 0 | -5 |
| 3 | 13 |
| 5 | 25 |
| 9 | 43 |
| 11 | 59 |

$\frac{\text { change in } y}{\text { change in } x}$

| $\frac{\text { Hours 0-3 }}{\frac{\$ 18}{3 h r}}$ | $\frac{\$ 12}{2 h r}$ |  | $\frac{\$ 18}{4 h r}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| $\frac{\$ 16}{2 h r}$ |  |  |  |  | $=\$ 6$ per $h r=\$ 6$ per $h r=\$ 4.50$ per $h r=\$ 8$ per $h r$

## Homework:

- Teach your parents worksheet!!!
- You have to do the explaining, THEY have to write all the work
- PLEASE try to find time to do this tonight. It is due tomorrow, and it will be by far the most helpful the night before the quiz.
- However, if your parents were both absolutely too busy, you may turn it in later and I may give you a time extension.

