

Graphing a Line Given Slope and Y-Intercept

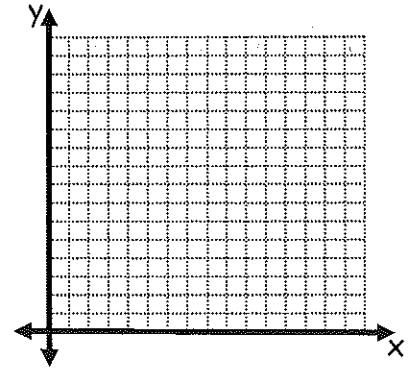
Class Notes

Name _____

Date _____ Period 4th

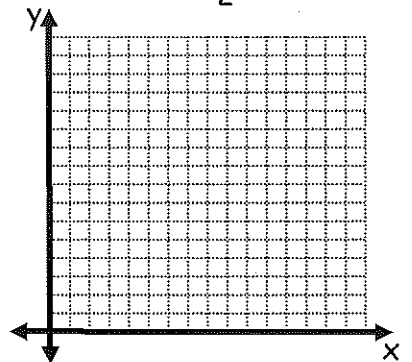
1. Joshua is participating in the school math-a-thon to raise money for the end-of-year field trip. His mother is donating \$10 to get her started. he will receive \$2 for every problem she answers correctly.

- Graph the situation.
- What is the slope?
- What is the y-intercept?
- How many answers does she have to get correct to earn \$34?



2. Patti bought a plant that was 8 inches tall. The plant is growing at a rate of $\frac{1}{2}$ inch per week.

- Graph the situation.
- What is the slope?
- What is the y-intercept?
- How tall will the plant be in 9 weeks?

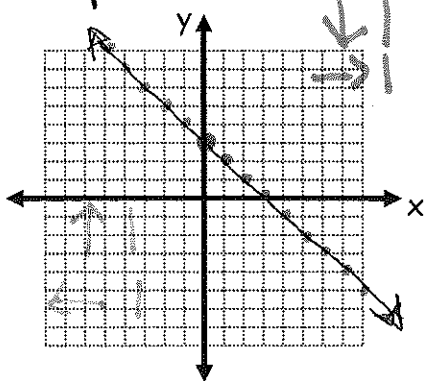


Graph each of the following given the slope and y-intercept.

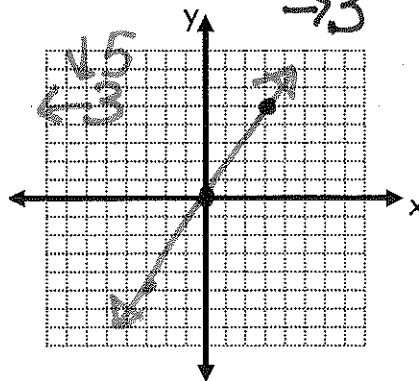
$\frac{m}{\text{Slope: rise/run}}$

$\frac{b}{\text{y-intercept (0,b)}}$

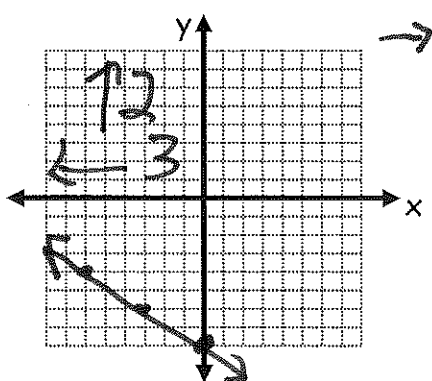
3. $m = -1, (0, 3)$



4. $m = \frac{5}{3}; (0, 0)$

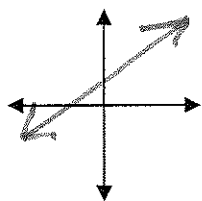


5. $m = -\frac{2}{3}, b = -8$

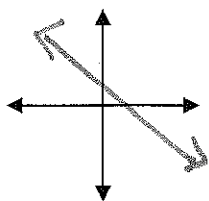


1. Start at b
2. use m to graph points

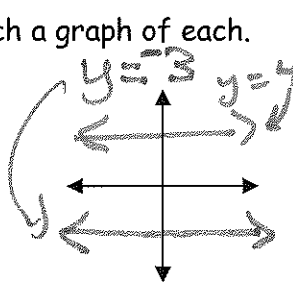
6. There are four types of slope. Name and sketch a graph of each.



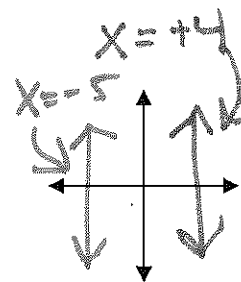
Positive



Negative



Zero



Undefined

Given the following equations in slope-intercept form, state the values for the slope and y-intercept and graph. Below each graph, identify the type of slope.

7. $y = -x + \frac{1}{2}$

$m =$
$b =$

8. $y = x$

$m =$
$b =$

9. $y = -\frac{x}{4} + 5$

$m =$
$b =$

