

Warmup $10/(8^0)$

1. Copy and complete the table using the equation **$y = 4x + 10$** .

x	y
0	
1	
2	
3	
4	

2. Picture the graph of these values. How would the **4** from the equation be shown in the graph?
3. How would the **10** from the equation be shown in the graph?

PLAN FOR THIS WEEK

- **Today-Tomorrow:** Slope-Intercept Form
- **Wednesday:** Review
 - Rate of Change
 - Slope (with graph)
 - Slope (using formula, without graph)
 - Slope-Intercept Form
- **Thursday:** Linear Quiz
- **Friday:** Last Day of the 9 Weeks!

“Hidden” Candy Problem

- Congratulations to the following people, who all knew the correct way to spell “consonants”.
- These people will all get a piece of candy (claim after class!)

- Reggie L

- Graham G

- Hana H

- Grace H

- Zander K

- Avin E

- Josh A

- Macy O

Top Gainers: 1st 9 Weeks

- Cooper B +7%
- Gretchen W +7%
- Deedrick W +7%
- Ella Clare +8%
- Cayla G +8%
- Avin E +8%
- Max R +8%
- GiGi A +10%

**Piece of Candy for each,
2 pieces for top gainer!
(claim after class)**

ALEKS Progress Grade

- Tonight, I will enter in a grade based on how much ALEKS progress you've made this 9 weeks.
 - This will be a **homework** grade, but is weighted much more than one normal assignment.
-

• +4% or more:	100
• +3% :	85
• +2%:	70
• +1%:	50
• +0%:	0

ALEKS Progress Grade

- **THIS GRADE CAN STILL IMPROVE.** Any extra ALEKS you do BETWEEN NOW AND THURSDAY NIGHT will count and I will update your progress grade. (Unless you already have the maximum progress score, in which case it will carry over to the next 9 weeks)
- There are still 30 minutes of ALEKS due on Monday. This will be the first homework grade of the 2nd 9 weeks!

Your grade for this 9 weeks

90%: Summatives

Fractions, Decimals,
Roots Quiz

Functions Test

Pattern
Poster
Project

Fractions, Decimals,
Roots Test

Linear/Slope Quiz

Warmup
Grade

10%: Homework

Normal Homework Assignments

Weekly ALEKS

ALEKS Progress
Grade

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- p. 5 What is a function?
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- p. 11 Slope-Intercept Form**

THIS IS A HANDOUT!

Slope-Intercept Form

Objective:

- ◉ Be able to graph the equation of a straight line without making a table
- ◉ Be able to write an equation of a straight line from a graph

GOING OVER FRIDAY'S ACTIVITY...

- ◉ Elmo

Using Desmos to predict graphs

- $y = 4x + 1$
- $y = 3x + 8$
- $y = -5x$
- $y = \frac{1}{2}x + 4$
- $y = x + 3$
- $y = \frac{2}{3}x - 4$
- $y = -\frac{1}{3}x + 5$
- $y = \frac{7}{3}x$

SUMMARIZING FRIDAY...

- ◉ The coefficient of x is the SLOPE: it controls how steep the line is
- ◉ In the table, the outputs will increase or decrease by that much
- ◉ The number being “added or subtracted” is the Y-INTERCEPT: it “slides” the entire graph up or down that much

COPY THIS INTO THE BOX!!!

Slope-Intercept Form

$$y = mx + b$$

“m” is the slope

-It controls how STEEP the line is

“b” is the Y-intercept

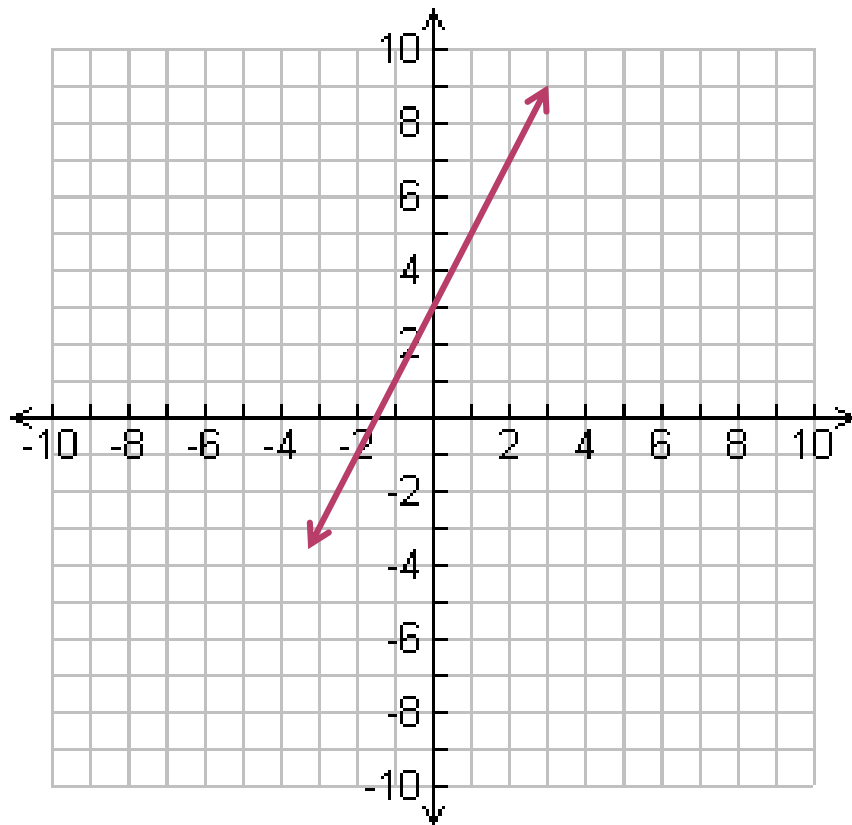
-The point where the line crosses the y-axis
(This is because if you plug in “0” for x,
you get this number for y)

(I’m not sure why they picked those letters. If you find out why you can share it with the class)

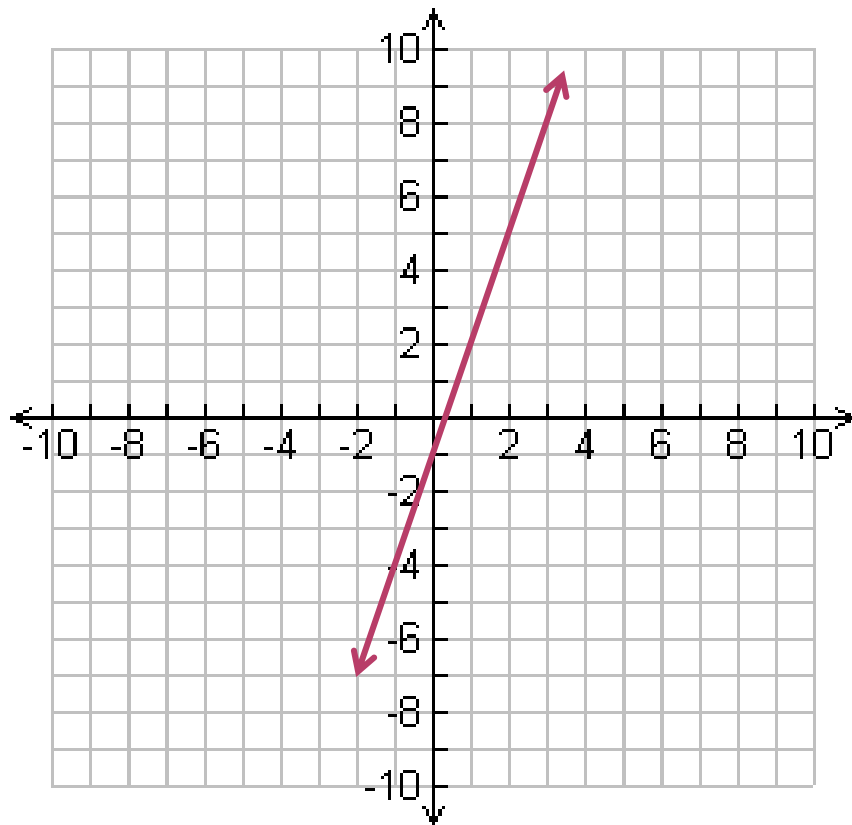
EXPLORING SLOPE-INTERCEPT FORM

- ◉ <https://www.desmos.com/calculator/59qdbtnlzy>

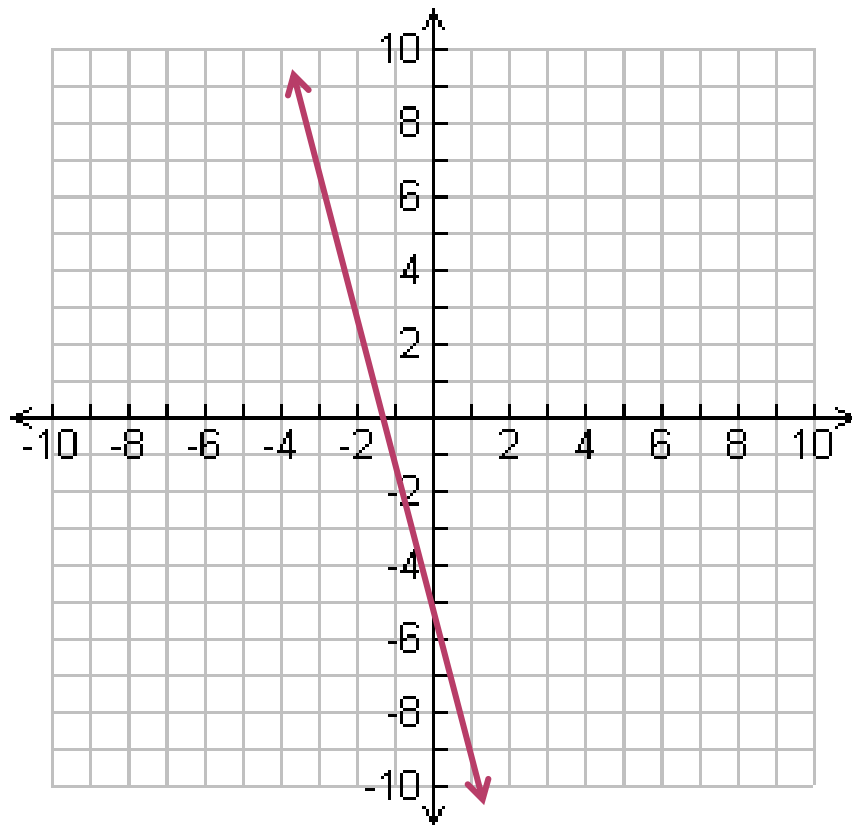
⦿ Graph: $y = 2x + 3$



⦿ Graph: $y = 3x - 1$

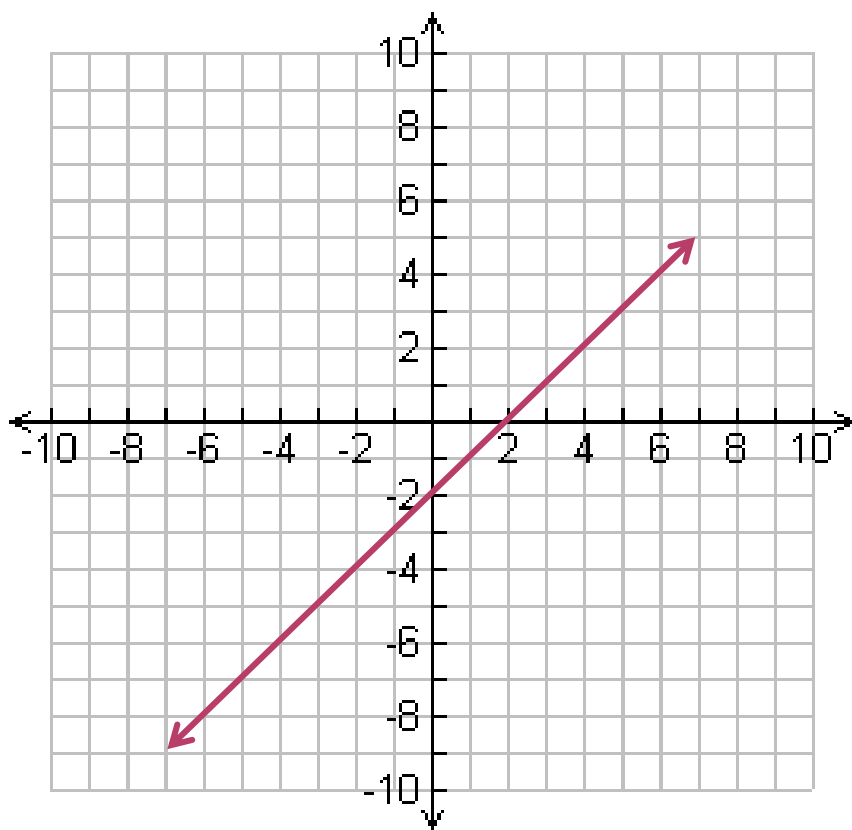


⦿ Graph: $y = -4x - 5$



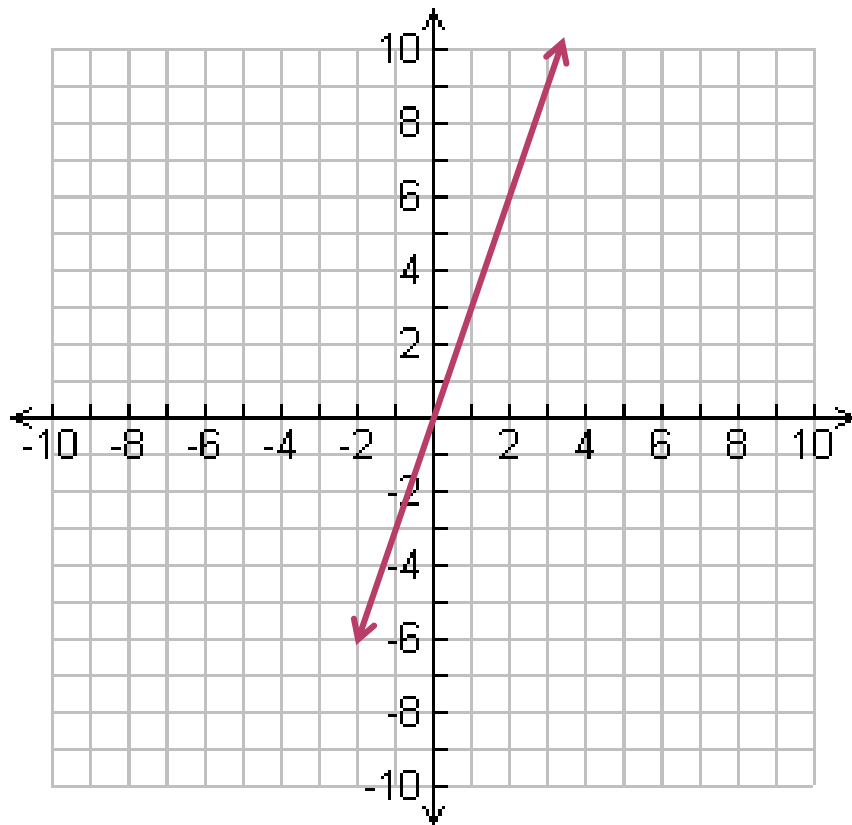
⦿ Graph: $y = x - 2$

Slope is 1!

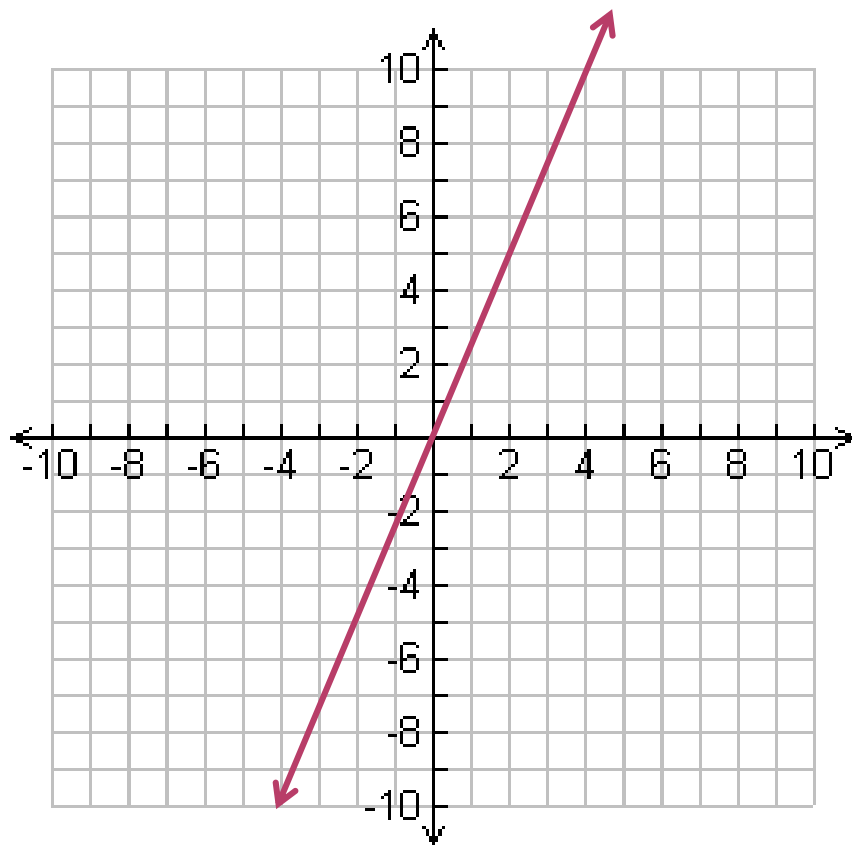


⦿ Graph: $y = 3x$

Y-intercept is 0!



Graph: $y = \frac{5}{2}x$



(3 MORE)

⊙ $y = \frac{1}{2}x + 4$

⊙ $y = -\frac{1}{3}x$

⊙ $y = \frac{5}{7}x + 1$

HOMEWORK: SLOPE-INTERCEPT FORM 4-SECTION WORKSHEET

⦿ Due Wednesday