Algebra 1 (Q2)

"I have never let my schooling interfere with my education" –Mark Twain

Overview:

This quarter we will be focusing more on solving linear equations and graphing linear equations. You will be able to identify and plot points in a coordinate plane, as well as graphing linear equations in a coordinate plane in more than one way. We will also be going over ratios that will help you calculate your grades for each class individually.

Lessons:

___**3.1/3.2:** Solve Equations (One Step/Two Step)

___**3.3:** Solve Multi-Step Equations

___**3.4:** Solve Equations with Variables on Both Sides

___**3.5/3.7:** Write Rations/ Solve Percent Problems

___**3.8:** Rewrite Equations and Formulas

___**4.1/4.2:** Graph Linear Equations

___**4.3:** Graph Using Intercepts

___**4.4:** Find Slope and Rate of Change

___**4.5:** Graph Slope-Intercept Form

___**5.1:** Write Linear Equations in Slope-Intercept Form

___**5.2:** Use Linear Equations in Slope-Intercept Form

___**5.3:** Write Linear Equations in Point-Slope Form

___**5.4:** Write Linear Equations in Standard Form

Guiding question 4: How do the tools of algebra relate to equations and modeling relationships in graphic or chart form? How can you use operations on and properties of real numbers?

____ ***8)*** Vocabulary: **Inverse Operations, Equivalent Equations, Reciprocal, Like Terms, Distributive Property, Identity, Input, Output.** (Do one of the below)

a. Create a mind-map with connections, a story, or a drawing with captions that shows the connections between the above terms.

b. Create vocabulary cards of the above terms. Be sure to include an example for each!

____ ***9) Problem Sets*:** You will find the problems in the textbooks located in the classroom **OR** in the pdf form on Google Classroom. You must complete the whole set for full credit.

____ a. 3.1: Solve One-Step Equations (p. 137 #'s 3-13 odds)

____ b. 3.2: Solve Two-Step Equations (p. 144 #'s 3-13 odds)

____ c. 3.3: Solve Multi-Step Equations (p.150 #'s 3-25 odds)

____ d. 3.4: Solve Equations with Variables on Both Sides (p. 157 #'s 3-41 every 3rd))

DUE: Friday November 3rd

____ ***10)*** ***ASSESSMENT:*** Solving Equations with Variables **(Friday, November 3rd)**

Guiding question 5:

"How are verbal and algebraic models and formulas used to represent real life situations?"

"How do you solve proportions?"

"In what ways can the skill of solving equations be applied to solve real world problems?"

____ ***11)*** Vocabulary**: Ratio, Proportion, Simplest Form, Percent, Quadrants, Coordinate Plane, Ordered Pairs, Standard form of linear equations, Literal Equations, Formula, Linear function, x-intercept, y-intercept** (do one of the below).

a. Create a mind-map with connections, a story, or a drawing with captions that shows the connections between the above terms.

b. Create vocabulary cards of the above terms. Be sure to include an example for each!

____ ***12) Problem Sets:*** You will find the problems in the textbooks located in the classroom **OR** in the pdf form on Google Classroom. You must complete the whole set for full credit.

____ a. 3.5: Write Ratios and Proportions (p. 165 #'s 7-17 odds)

____ b. 3.7: Solve Percent Problems (p.179 #'s 9-17 odds)

____ c. 3.8: Rewrite Equations and Formulas (p. 187 #'s 3-19 odds)

____ d. 4.2: Graph Linear Equations (p. 219 #'s 3- 31 odds)

____ e. 4.3: Graph using Intercepts (p. 229 #'s 5-35 odds)

____ ***10) Mini Group Project:*** In your Algebra I group, complete the following tasks:

____ a. Create your own puzzle describing how to graph a linear function

DUE: November 17th

____ ***11)*** ***ASSESSMENT:*** Graphing Linear Equations **(Friday, November 17th)**

Guiding question 6:

What is slope and how is it related to solutions of a system of linear equations?

____ ***12)*** Vocabulary: **Slope, Rate of Change, Slope-Intercept Form,** Parallel (do one of the below).

a. Create a mind-map with connections, a story, or a drawing with captions that shows the connections between the above terms.

b. Create vocabulary cards of the above terms. Be sure to include an example for each.

____ ***13) Problem Sets*:** You will find the problems in the textbooks located in the classroom **OR** in the pdf form on Google Classroom. You must complete the whole set for full credit.

____ a. 4.4: Find Slope and Rate of Change (p. 239 #'s 5-15 odds)

____ b. 4.5: Graph Using Slope-Intercept Form (p. 247 #'s 3-29 odds)

____ c. 5.1: Write Linear Equations in Slope-Intercept Form (p. 286 #'s 3-15 odds, 25-37 odds)

____ d. 5.2: Use Linear Equations in Slope-Intercept Form (p.296 #'s 11- 27 odds)

DUE: Friday, December 1st

____ ***14)*** ***ASSESSMENT:*** **Slope-Intercept Form** **(Friday, December 1st)**

____ ***15)*** **Vocabulary: Point-Slope Form, Standard Form** (do one of the below).

a. Create a mind-map with connections, a story, or a drawing with captions that shows the connections between the above terms.

b. Create vocabulary cards of the above terms. Be sure to include an example for each!

____ ***16) Problem Sets*:** You will find the problems in the textbooks located in the classroom **OR** in the pdf form on Google Classroom. You must complete the whole set for full credit!

____ a. 5.3: Write Linear Equations in Point-Slope Form (p. 305 #'s 3-27 odds)

____ b. 5.4: Write Linear Equations in Standard Form (p.314 #'s 5-27 odds)

DUE: Friday, December 15th

____ ***17) Graphic Organizer:*** Complete the graphic organizer "Forms of Linear Equations." This will help you keep track of the different ways we can show linear equations as well as how to go from them to the graphs and vice-versa.

FINAL ASSESSMENT Week of December 18th*:*

____ ***18) Final Project:*** Make a 'GAME' of it

See Rubric and Instructions for details.

____ ***19) Chapter 3, 4, 5*** Final Assessment **(Friday, December 22nd)**