Name: _____

Algebra II
(10/29-11/16)

"**Mathematics is the music of reason.**"

– James Joseph Sylvester

Overview:

Welcome to Quarter Two! We will be taking a look at linear systems, and how to apply matrix notation to manipulate large sets of data. In doing so, we will be able to transform values we know to find multiple ones we are looking for. Applications of this include the use of excel spreadsheets, the organization of business profits and expenses, as well as more theoretical breakthroughs such computer science algorithms and the formulation of quantum physics. In addition, we will take a short look at quadratic equations and get a glimpse of how to graph equations containing the term x^2.

UPDATES:

- **No late work will be accepted from this point forward.**

- **You will now be required to submit your warm up/exit ticket by worksheet; more information will be available during class.**

- **IXL recommended skills must be at least the 9th grade level to count towards your grade.**

Lessons:

Content Lesson Themes

____ Linear Systems: An Intuitive Approach   ____ 3.2: Solve Linear Systems Algebraically

____ 3.1: Solve Linear Systems by Graphing   ____ 3.3: Systems of Linear Inequalities

Unit Question: Given a menu filled with combo meals, how can we determine which one is the best deal?

Assignments	Due Date (BoC)

10/29-11/2:
 	
Guiding Question: Where does this idea of systems of linear equations come from?
 	
____ **Lesson: Linear Systems (an Intuitive approach)**
 	
____ **1)** Vocabulary: **system of linear inequalities, solution, matrix, dimensions** (of a matrix), **element, scalar, scalar multiplication,** (do one of the below).
 	
     a. Write the words, their definitions, and an example for each of the above terms in your notebook.
 	
     b. Create a mind-map with connections, a story, or a drawing with captions that shows the connections between the above terms.
 	
     c. Create vocabulary cards of the above terms. Be sure to include an example for each.
 	
____ **Lesson:** 3.1: Solving Linear Systems by Graphing
 	
____ *2) Problem Set:* 3.1 (p.156 #'s 1-13 odds)
     I will specifically be looking for **neatly** graphed equations with the solution **clearly** shown.
 	
____ *3) IXL:* Achieve proficiency in 3 skills (smart-score of 80) **OR** spend 1-hour total for the week. You may work either in:
 	
     a. Recommended Tab (AT LEAST 9th grade level!)
     b. Algebra II: E.1-E.5
Note: If you choose to achieve proficiency, you must work on your skills for at least 30min.
	
	Thurs, 11/1
	
	Mon, 11/5
	
	Mon, 11/5

11/5-11/9: **Guiding Question: Is there an easier way to find the "intersection" of linear equations? What if there's more than one solution?** ____ **Lesson:** 3.2: Solve Linear Systems Algebraically ____ *4)* **Problem Set** – 3.2 (p.164 #'s 3-25 odds) ____ **Lesson:** 3.3: Graph Systems of Linear Inequalities ____ *5)* **Activity:** Thanksgiving Systems of Inequalities	 **Thurs, 11/9** **Next Class Meeting**

____ *6) IXL:* Achieve proficiency in 3 skills (smart-score of 80) **OR** spend 1-hour total for the week. You may work either in: a. Recommended Tab (AT LEAST 9th grade level!) b. Algebra II: E.6-E.9, F.1, F.2	**Mon, 11/12**
11/12-11/16: ____ **TUESDAY ONLY: Catch-up day:** On this day, you must: 1. Work on IXL for 45 minutes (CANNOT BE MADE UP!) 2. Submit any individual work you may have missed in the past two weeks. ____ *7) Kahoot Review:* Review for the assessment which will occur during the second hour of class.	**Thurs, 11/15**

___ *26)* *Assessment: Systems of Equations/Inequalities* (**Thurs, 11/15**)

Have a great Thanksgiving Break!