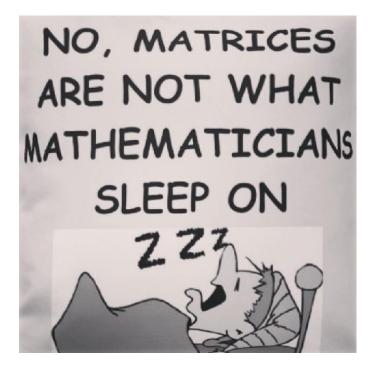
# Pre-Calculus (10/29-11/16)



"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.

### **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 9<sup>th</sup> grade level to count towards your grade.

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#### Lessons:

## **Content Lesson Themes**

\_\_\_\_ Linear Systems: An Intuitive Approach

\_\_\_\_\_7.1/7.2: Systems of Equations by Algebra

\_\_\_\_\_ Solve Linear Systems by Graphing

\_\_\_\_\_7.4: Matrices and Systems of Equations

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

Assignments	Due Date (BoC
0/29-11/2:	
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, row-echelon form, reduced row-echelon form, ordered triple, gaussian elimination, independent, dependent, matrix, identity matrix (do one of the below).	Thurs, 11/1
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: Solving Linear Systems by Graphing	Mon, 11/5
2) Worksheet: Solving systems of linear equations	
<i>3) IXL:</i> Achieve proficiency in 3 skills (smart-score of 80) <b>OR</b> spend 1-hour total for the week. You may work either in:	Mon, 11/5
<ul> <li>a. Recommended Tab (AT LEAST 9<sup>th</sup> grade level!)</li> <li>b. Pre-Calculus: I.1, I.2, I.3, I.10</li> <li>Note: If you choose to achieve proficiency, you must work on your skills for at least 30min.</li> </ul>	
1/5-11/9:	
Guiding Question: Is there an easier way to find the "intersection" of linear equations? What if there are more than two variables? Three?	
Lesson: 7.1/7.2: Solving Systems of Equations by Substitution and Elimination	
<i>4)</i> <b>Problem Set:</b> <u>7.1: p.481 #'s 1-17 odds</u> <u>7.2: p. 491 #'s 1-15 odds</u>	Thurs, 11/8
Lesson: 7.4: Matrices and Systems of Equations	
<b>5) Problem Set:</b> 7.4: p.521 #'s 1-35 odds, 41, 43, 49, 55	Next Class Meeting

<ul> <li>6) <i>IXL</i>: Achieve proficiency in 3 skills (smart-score of 80) OR spend 1-hour total for the week. You may work either in:</li> <li>a. Recommended Tab (AT LEAST 9<sup>th</sup> grade level!)</li> <li>b. Pre-Calculus: I.4-I.7</li> </ul>	Mon, 11/12
11/12-11/16:	
7) <i>Kahoot Review:</i> Review for the assessment which will occur during the second hour of class.	Thurs, 11/15

# <u>26) Assessment: Systems of Equations/Matrices (Thurs, 11/15)</u>

# Have a great Thanksgiving Break!

