**ARC Week at Glance**

**Subject: Math Course: Advanced Algebra Concepts & Connections Grade: 9th – 12th Dates: 2/24 to 2/28**

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| **Standard(s):**  AA.PAR.6.1 Use matrices to represent data, and perform mathematical operations with matrices and scalars, demonstrating that some properties of real numbers hold for matrices, but that others do not.  AA.PAR.6.2 Rewrite a system of linear equations using a matrix representation.  AA.PAR.6.3 Use the inverse of an invertible matrix to solve systems of linear equations.  **Assessment(s):  Quiz  Unit Test  Project  Lab** | | | | | | |
|  | **Learning Target**  **(I am learning about…)** | **Criteria for Success**  **(I can…)** | **Opening**  *(10 - 15 Mins)* | **Work-Session**  *(20 - 25 mins)* | **Closing**  *(5 - 10 mins)* | **Literacy Tasks/Focus** |
| *(Include at least one/two formatives\*in any part of the lesson as needed)* | | |
| **Monday** | I am learning how to perform operations with matrices. | I can define and construct matrices. I can also add, subtract, and multiply matrices. | #’s 1 – 3 on Practice for Matrix Operations | #’s 4 – 12 on Practice for Matrix Operations  \*Formative | # 13 on Practice for Matrix Operations | How did you determine the prices of food items with tax included? |
| **Tuesday** | I am learning how to perform operations with matrices. | I can define and describe matrices and I can add, subtract, and multiply matrices. | Quick study, Q&A | Quiz on Matrix Operations  \*Summative | Check things over before turning in! | Use a matrix to organize data for a real-world word problem. |
| **Wednesday** | I am learning how mathematical properties are applied to matrix math. | I can apply and use the commutative, associative, identity and inverse properties with matrices | Quick Review-  Properties of Real #’s  Page 1 in “Walk Like a Mathematician” Learning Task | “Walk Like a Mathematician” #’s 1 – 4 | “Walk Like a Mathematician” #5 | Is there a zero or identity for **adding** matrices? If so, what would it look like? What does the product of a matrix and it’s inverse equal? |
| **Thursday** | I am learning how mathematical properties are applied to matrix math. | I can find the determinant of a matrix and I can use this skill to find the area of triangles. | “Walk Like a Mathematician”  #’s 6 | “Walk Like a Mathematician”  #’s 6 – 7 | “Walk Like a Mathematician”  # 8 | Suppose a triangle with three vertices has an area of zero. What do you know about the three vertices? |
| **Friday** | I am learning about how to apply the inverse property to matrices. | I can use inverse matrices to solve matrix equations. | Read Intro to “Candy? What Candy?” Learning Task“ | Complete/Model Solving Systems of Equations using Inverse Matrices. | #’s 1a, 1b and 1c on “Candy? What Candy?” Learning Task “ | What does each solution look like graphically? Explain. |

**\*** Exit Ticket/Final Stretch Check  Electronic Tools  Dry Erase Boards – quick checks  Turn & Talk Discussion (verbal responses)  Teacher Observation – document Clipboard

Quick Write/Draw  Annotation  Extended Writing  Socratic Seminar  Jigsaw  Thinking Maps  Worked Examples  Other : \_\_\_\_\_\_\_\_\_\_\_