**ARC Week at Glance**

**Subject: Math Course: Advanced Algebra Concepts & Connections Grade: 9th – 12th Dates: 2/10 to 2/14**

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| **Standard(s):**  AA.FGR.5.4 Use the structure of an expression to factor quadratics.  AA.FGR.5.8 Identify the number of zeros that exist for any polynomial based upon the greatest degree of the polynomial and the end behavior of the polynomial by observing the sign of the leading coefficient.  AA.FGR.5.9 Identify zeros of polynomial functions using technology or pre-factored polynomials and use the zeros to construct a graph of the function defined by the polynomial function. Analyze identify key features of these polynomial functions.  AA.FGR.5.11 Using all the zeros of a polynomial function, list all the factors and multiply to write a multiple of the polynomial function in standard form.  **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 learning about roots and factors of polynomial functions. | I can find roots and factors of polynomials | Return prechecked Polynomial Project with commentary | Complete the Polynomial Project with partners.  \*Summative | Begin the Unit 4 Practice Handout  (Due Wednesday)  \*Formative | Did you correct work based on feedback you received? Do you need more help? |
| **Tuesday** | I learning about roots and factors of polynomial functions. | I can write polynomial equations and graph them when provided the roots of the function. | “Zero Zappers Diagnostic Activity | Complete Zero Zappers Explore Activity in small groups | Share exemplars and do nots with student samples.  Homework- Finish Unit 4 Practice  \*Formative | How can you use the zeros of a function to sketch its graph and write the equation? |
| **Wednesday** | I am learning polynomial functions. | I can simplify complex numbers, graph parabolas, factor quadratics and find zeros of polynomials. | How do you simplify powers of i? How do you find the vertex of a parabola? | Unit 4 Practice & Review  \*Formative | Q&A, Exemplars | What do you know? What do you need to know? |
| **Thursday** | I am learning polynomial functions. | I can simplify complex numbers, graph parabolas, factor quadratics and find zeros of polynomials. | Quick Study | Unit 4 Test  \*Summative |  |  |
| **Friday** | Teacher professional Development Day |  |  |  |  |  |

**\*** 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 : \_\_\_\_\_\_\_\_\_\_\_