**ARC Week at Glance**

**Subject: Math Course: Advanced Algebra Concepts & Connections Grade: 9th – 12th Dates: 3/24 to 3/28**

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| **Standard(s):** AA.GSR.7 Develop an introductory understanding of the unit circle; solve trigonometric equations using the unit circle. AA.GSR.7.1 Define the three basic trigonometric ratios in terms of x, y, and r using the unit circle centered at the origin of the coordinate plane.**Assessment(s):** [x]  **Quiz** [ ]  **Unit Test** [x]  **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 about special right triangles. | I can determine side lengths with 30, 60, 90 and 45,45,90 triangles. | Revisiting Special Right Triangles with teacher guidance. | Practice with Special Right Triangles with partners. | Check work, share exemplars and do nots. | How do you remember the side lengths with these special right triangles? |
| **Tuesday** | I am learning about the unit circle. | I can develop an understanding of the unit circle and define sine, cosine, and tangent in terms of the unit circle. | Right Triangles and the Unit Circle - Diagnostic Assessment(page 1 in the Right Triangles and the Unit Circle Learning Task) | Right Triangles and the Unit Circle – **Desmos Activity****(Link in GADOE Instructional Learning Plan)** | Challenge Questions #1 and 2 | Explain how the unit circle definition of sin and cosine are related |
| **Wednesday** | I am learning about the unit circle. | I can label and interpret radian measures of angles around the unit circle. | Introducing the Unit Circle Learning Task Parts I and IIA: | Introducing the Unit Circle Learning Task Parts IIB and IIC: | Introducing the Unit Circle Learning Task Part III | What are some strategies or patterns you saw when converting the angle measures in degrees to radians? |
| **Thursday** | I am learning about the unit circle. | I can label and interpret radian measures of angles around the unit circle. | Label the unit circle handout with degrees and radian measures.\*Formative Quiz | Constructing a Unit Circle Task Steps 1 & 3 in pairs (Skip Step 2, the unit circle with axis will be provided) | Label the unit circle handout with degrees and radian measures.\*Summative Quiz | What are some strategies or patterns you saw when converting the angle measures in degrees to radians? |
| **Friday** | I am learning about the unit circle. | I can label the coordinates of the endpoints of interest around the unit circle. | Label triangles’ side measures (you cut these out yesterday).\* Teacher displays special right triangle lengths for reference | Constructing a Unit Circle Task Steps 4 – 9 in pairs with teacher guidance, checks and exemplars shared.**\*2-DAYS!** | Check work, share exemplars and do nots. | How do you remember the endpoints with these special right triangles? |

**\***[ ]  Exit Ticket/Final Stretch Check [x]  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 [x]  Worked Examples [ ]  Other : \_\_\_\_\_\_\_\_\_\_\_