

## ARC Week at Glance

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

<b>Standard(s):</b> 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. <b>Assessment(s):</b> <input checked="" type="checkbox"/> Quiz <input type="checkbox"/> Unit Test <input checked="" type="checkbox"/> Project <input type="checkbox"/> Lab <input type="checkbox"/>						
	<b>Learning Target (I am learning about...)</b>	<b>Criteria for Success (I can...)</b>	<b>Opening</b> <i>(10 - 15 Mins)</i>  <i>(Include at least one/two formatives*in any part of the lesson as needed)</i>	<b>Work-Session</b> <i>(20 - 25 mins)</i>	<b>Closing</b> <i>(5 - 10 mins)</i>	<b>Literacy Tasks/Focus</b>
<b>Monday</b>	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?
<b>Tuesday</b>	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 – <b>Desmos Activity</b> <b>(Link in GADOE Instructional Learning Plan)</b>	Challenge Questions #1 and 2	Explain how the unit circle definition of sin and cosine are related
<b>Wednesday</b>	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?
<b>Thursday</b>	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. <b>*Formative Quiz</b>	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. <b>*Summative Quiz</b>	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. <b>*2-DAYS!</b>	Check work, share exemplars and do not.	How do you remember the endpoints with these special right triangles?
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☐ Quick Write/Draw ☐ Annotation ☐ Extended Writing ☐ Socratic Seminar ☐ Jigsaw ☐ Thinking Maps ☒ Worked Examples ☐ Other : \_\_\_\_\_