**ARC Week at Glance**

**Subject: Math Course: Advanced Algebra Concepts & Connections Grade: 9th – 12th Dates: 3/17 to 3/21**

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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):  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 about sin, cosine, and tangent. | I can use trigonometric ratios to solve problems. | Right Triangle Trigonometry  Learning Task page 1 | Right Triangle Trigonometry  Learning Task  pages 3 - 9 | Right Triangle Trigonometry Learning Task page 2 | What kind of jobs or skills rely on right triangle trigonometry?  In what way? |
| **Tuesday** | I am learning about applications with right triangle trigonometry. | I can define and apply sine, cosine, and tangent ratios to right triangles and solve application problems using the trigonometric ratios. | Real-World Example 1  on the Right Triangle Trigonometry  Learning Task page10 | Right Triangle Trigonometry  Learning Task  pages 10 - 13 | Quick Quiz on Trigonometry Ratios  \*Formative  \*\*Summative will be tomorrow’s Opening | You and your partner create a right triangle word problem and share it. |
| **Wednesday** | I am learning about how sin, cosine, and tangent can be used in the real-world. | I can define and apply sine, cosine, and tangent ratios to right triangles and solve application problems using the trigonometric ratios. | Quick Quiz on Trigonometry Ratios  \*Summative | Find that Side or Angle Learning Task  #’s 1 and 3 with teacher guidance and #’s 2 – 4 with peer | Share methodology for #’s 2 and 4 on Find that Side or Angle Learning Task | Explain why you chose a particular trig ratio for each application problem you did today. |
| **Thursday** | I am learning about how sin, cosine, and tangent can be used in the real-world. | I can define and apply sine, cosine, and tangent ratios to right triangles and solve application problems using the trigonometric ratios. | #’s 1 and 2 on  Practice & Review for Right Triangle Trigonometry | #’s 3 – 10 on  Practice & Review for Right Triangle Trigonometry  \*Formative | Check and share exemplars and do not’s. | Explain why you chose a particular trig ratio for each application problem you did today. |
| **Friday** | I am learning about how sin, cosine, and tangent can be used in the real-world. | I can define and apply sine, cosine, and tangent ratios to right triangles and solve application problems using the trigonometric ratios. | Retest on Quick Quiz on Trig Ratios if you didn’t take or make 100 last Friday.  \*Summative | Quiz on Right Triangle Trigonometry  \*Summative |  | Word problems, using and applying trig functions to find distance between houses and height of skateboard ramp. |

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