



| | Monday 9/11 | Tuesday 9/12 | Wednesday 9/13 | Thursday 9/14 | Friday 9/15 |
|--|--|--------------|---|--|--|
| ACCRS (Objectives): | <i>#18 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for complicated cases [F-IF7].</i> <i>#26 Determine amplitude, period, phase shift, domain, range of trig functions [AL].</i> <i>#27 Use the sum, difference, and half-angle identities to find exact values of trig functions. [AL]</i> <i>#29 Use special triangles to determine geometrically the values of sine, cosine, and tangent for 3π, 4π, and 6π, and use the unit circle to express the values of sine, cosine, and tangent for $\pi - x$, $\pi + x$, and $2\pi - x$ in terms of their values for x, where x is any real number [F-TF3].</i> <i>#30 Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions [F-TF4].</i> <i>#33 Use the Pythagorean identity to find trig values. [AL]</i> | | | | |
| Before: | | | *Warm-Up: Equations of Sine/Cosine | *Review Homework Set (Group Collab) | *Lesson: Trig Identities |
| During: | | | *Lesson: Applications of Sine/Cosine | *Cumulative Review Problems (Group Collaboration) | *Activity: Proving Trig Identities (1-14) |
| After: | | | *Group Collaboration Set /HW Set | *Discuss/Review answers to cumulative review problems | *Group Collaboration/ HW Set (Proving Trig Identities) |
| Desired Outcome: | | | Students will be able to solve problems using sine/cosine graphs. | Students will review trig functions. | Students will be able to use trig identities to solve problems. |
| Formative/ Summative: | | | *Student questioning during lesson and group collaboration. | *Self-Assessment (cumulative review) | *Student questioning during lesson and group collaboration. |
| Critical Questions: | | | Explain how to write a trig equation to model a sinusoidal graph. How does this allow us to predict values. | n/a | Explain how trig identities can be used to prove an equation. Explain the reciprocal identities. Explain the Pythagorean identities. |