


Precalculus Curriculum Bundle #7

Title		Suggested Dates
Trigonometric functions (continued from Bundles 4-6)		January 5 – January 29 (18 days)

Big Idea/Enduring Understanding	Guiding Questions
<ul style="list-style-type: none"> Trigonometric identities can be used to simplify expressions and solve equations 	<ol style="list-style-type: none"> How are the trigonometric identities used? How many different methods or strategies can be used to solve a trigonometric equation? Ambiguous case, determine the number of possible solutions of a particular triangle.

The resources included here provide teaching examples and/or meaningful learning experiences to address the District Curriculum. In order to address the TEKS to the proper depth and complexity, teachers are encouraged to use resources to the degree that they are congruent with the TEKS and research-based best practices. Teaching using only the suggested resources does not guarantee student mastery of all standards. Teachers must use professional judgment to select among these and/or other resources to teach the District Curriculum.

Knowledge & Skills with Student Expectations	District Specificity/Examples	Suggested Resources (See note above)	
<p>P.2 The student interprets the meaning of the symbolic representations of functions and operations on functions within a context.</p> <p>P.2C investigate identities graphically and verify them symbolically, including logarithmic properties, trigonometric identities, and exponential properties.</p>	<ul style="list-style-type: none"> Verify trigonometric identities. Simplify trigonometric expressions using trigonometric identities. 	<p>PreCalculus with Limits Houghton Mifflin Company / Larson – Hostetler</p> <p>Section 5.1 Using Fundamental Identities</p> <p>Section 5.2 Verifying Trigonometric Identities</p> <p>Section 5.4 Sum and Difference Formulas</p> <p>Section 5.5 Multiple Angle and Product to Sum Formulas</p>	
<p>P.3 The student uses functions and their properties, tools and technology to model and solve meaningful problems.</p> <p>P.3E solve problems from physical situations using trigonometry, including the use of Law of Sines, Law of Cosines, and area formulas and incorporate radian measure where needed.</p>	<ul style="list-style-type: none"> Use problem situations involving right triangle trigonometry, the Pythagorean Theorem, as well as Law of Sines and Law of Cosines and trigonometry area formulas. Know which formulas require radians as compared to degrees—such as length of an arc, apparent size, and area of sector. 	<p>PreCalculus with Limits Houghton Mifflin Company / Larson – Hostetler</p> <p>Section 5.3 Solving Trigonometric Equations</p> <p>Section 6.1 Law of Sines</p> <p>Section 6.2 Law of Cosines</p>	