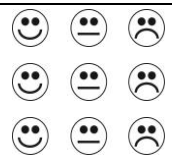
Algebra 2: Trigonometry

Learning Target 	 Success Criteria (What you need to know) 	How well do you know this? (YOU)	Are you sure? (US)
T1: Triangles & Trigonometry	✓ Given two angles in a triangle, find the measure of the third angle ✓ Given two sides of a right triangle, find the measure of the third side ✓ Be able to write the sine, cosine and tangent functions as a ratio of the sides of a triangle ✓ Be able to write the cosecant, secant and cotangent functions as a ratio of sides	☺ 😐 ☹	☺ 😐 ☹
T2: SOHCAHTOA	✓ Be able to identify which sides are opposite and adjacent to a given angle in a triangle. ✓ Write a trigonometric equation which represents a given triangle ✓ Solve trigonometric equations for a missing side ✓ Understand how to use inverse trigonometric functions ✓ Solve trigonometric equations for a missing angle	☺ 😐 ☹	☺ 😐 ☹
T3: Special Triangles	✓ Know the relationship between the lengths of the sides of a 45-45-90 and 30-60-90 triangle ✓ Be able to calculate the values of the trigonometric functions of a 30, 45, and 60 degree angle without a calculator ✓ Be able to solve problems involving special triangles without a calculator	☺ 😐 ☹	☺ 😐 ☹
T4: Law of Sines and Cosines	✓ Be able to use the Law of Sines to find unknown sides or angles in a non-right triangle ✓ Be able to use the Law of Cosines to find unknown sides or angles in a non-right triangle	☺ 😐 ☹	☺ 😐 ☹

T5: More Angles, Radian Measure	✓ Be able to draw any angle (positive or negative) on a set of axes ✓ Convert an angle in degree measure to one in radian measure ✓ Convert an angle in radian measure to one in degree measure ✓ Be able to put the calculator in the "proper mode" for evaluating trig functions		
T6: Reference Angles	✓ Find the reference angle for angles of negative degree or degrees greater than ninety ✓ Solve trigonometric problems involving angles that terminate in quadrants II, III, and IV ✓ Evaluate trig functions exactly for angles that have the special triangles as reference angles		
T7: Graphs of Trig Functions	✓ Be able to sketch the graph of sine, cosine and tangent ✓ Know the amplitude, midline, and period of the sine, cosine and tangent functions ✓ Use the unit circle to evaluate trig functions		
T8: Transformations of Trig Functions	✓ Understand how vertical translations affect the midline, the equations and the graphs of trig functions ✓ Understand how horizontal translations affect the phase shift, the equations and the graphs of trig functions ✓ Understand how dilations affect the amplitudes, equations and the graphs of trig functions		
T9: Basic Trig Identities	✓ Be able to simplify expressions involving trig functions using basic identities ✓ Be able to prove that identities involving trig functions are true by simplifying one side