**Units 1-6 Cumulative Test:**

1. Write the equation of a hyperbola or ellipse given certain characteristics (including the problems when given a point on the ellipse/hyperbola): <http://www.purplemath.com/modules/ellipse3.htm> <http://www.purplemath.com/modules/hyperbola3.htm>
2. Evaluating inverse trig expressions:

<http://www.themathpage.com/atrig/inverseTrig.htm> (Click on Trigonometry. Scroll to #19. Everything until you get to the section with this heading: The Range of y =arcsecx)

<https://www.khanacademy.org/math/trigonometry/unit-circle-trig-func/inverse_trig_functions/e/inverse_trig_functions>

<http://oakroadsystems.com/twt/inverse.htm>

<https://www.youtube.com/watch?v=8FU2jmB6kqk>

<https://www.youtube.com/watch?v=Zud3aCeSLRs>

1. Write the equation of a sine/cosine function given a graph:

<https://www.youtube.com/watch?v=vz1QVNL_0Bs>

<http://laurashears.info/math122/unit2/graphs_to_eqtn/>

1. Given a point on a terminal side solve for the remaining trig functions:

<http://www.purplemath.com/modules/quadangs2.htm>

1. Find the area of a triangle using Heron’s Formula and Trig:

<http://www.mathwarehouse.com/geometry/triangles/area/herons-formula-triangle-area.php>

<http://www.regentsprep.org/regents/math/algtrig/att13/triareatrigprac.htm>

1. Solve a triangle using Law of Sines or Law of Cosines:

<http://www.regentsprep.org/regents/math/algtrig/att12/indexATT12.htm>

1. Simplifying Trig Expressions using Identities:

Trig Expressions Simplifying Calculator (use this on any problems you redo from this unit): <http://www.webmath.com/trigsimp.html>

<https://www.khanacademy.org/math/trigonometry/less-basic-trigonometry/pythagorean-identity/e/pythagorean_identities>

<http://www.analyzemath.com/trigonometry/simplify_trig.html>

1. Solving Trig Equations:

<http://www.sosmath.com/algebra/solve/solve0/solvtrig.html>

<http://patrickjmt.com/solving-trigonometric-equations/>