**Honors Precalc Unit 1: Algebra Review Topics**

1. Algebra Review
   1. Linear equations- graphing and writing
   2. Slope- from 2 points, equations, graph
   3. Parallel and perpendicular lines
   4. Radicals- reduce and simplify with operations
   5. Factoring
   6. Exponents
   7. Simplify polynomials
   8. Imaginary and Complex Numbers
   9. Graphing equations
   10. Finding x and y intercepts from an equation (x- intercepts are the zeros)
   11. Triangle trigonometry, special right triangles, Pythagorean theorem
2. Distance and midpoint theorem
   1. Triangles- medians, altitudes, perpendicular bisectors, area
   2. Quadrilaterals
3. Circles
   1. Graphing
   2. Write the equation
4. Operations and Compositions
   1. Add, subtract, multiply and divide
   2. fog, gof, fof
5. Functions
   1. Is it a functions- from points, chart, mapping, graph, equation
   2. Find domain from equation- 2 rules
   3. Find domain, range, min, max, increasing, decreasing from graph
6. Inverse Functions
   1. Find the inverse function
   2. Prove 2 functions are inverses of each other
7. Parent graphs/ Transformations
   1. Label changes and graph
   2. Write equation from given changes