Pre-Calculus Power Standards

1. Students will understand and apply mathematical concepts and procedures:
   a. Use function notation and vocabulary to evaluate and describe characteristics of functions.
   b. Use multiple methods to model and solve absolute value, quadratic and radical functions.
   c. Model, solve, and graph linear, non-linear and systems of equations/inequalities.
   d. Construct and describe new functions using transformations of a parent function.
   e. Model and solve exponential and logarithmic functions.
   f. Model, solve, identify characteristics and describe graphs of polynomial functions of higher degree.
   g. Simplify and solve rational expressions and equations.
   h. Use multiple methods to identify, model and solve arithmetic and geometric sequences/series
   i. Model, solve and identify key characteristics of Trigonometric functions.
   j. Use multiple methods to model and solve Trigonometric equations.
   k. Verify and identify Trigonometric Identities.
   l. Use multiple methods to identify, model and solve Vectors and Complex Numbers
2. Student will use mathematics to define and solve problems:
   a. Analyze problems and represent them mathematically.
3. Students will use and apply mathematical reasoning:
   a. Evaluate a solution for reasonableness, verify its accuracy and interpret the solution in the context of the problem.
4. Students will communicate knowledge and understanding in both everyday and mathematical language.
   a. Summarize mathematical ideas with precision, efficiency, and accuracy.
   b. Read and interpret diagrams, graphs, and text related to mathematical situations.