Algebra II Power Standards

1. Students will understand and apply mathematical concepts and procedures:
   a. Compute basic operations of integers and fractions without technology
   b. Use function notation and vocabulary to evaluate and describe characteristics of functions.
   c. Use multiple methods to solve absolute value and radical functions.
   d. Model, solve, and graph linear, non-linear and systems of equations/inequalities.
   e. Construct and describe new functions using transformations of a parent function.
   f. Use multiple methods to model, solve and identify arithmetic and geometric sequences/series.
   g. Use multiple methods to model, solve and identify key features of quadratic functions.
   h. Model and solve exponential and logarithmic functions.
   i. Model, solve, identify characteristics and describe graphs of polynomial functions of higher degree.
   j. Simplify and solve rational expressions and equations.
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.