Unit 4 Objectives – Math 002

Students should be able to:

1. Simplify exponential expressions using the properties of exponents with rational exponents.
2. Convert from rational exponent form to radical form and vice versa.
3. Use the product and quotient rules to simplify radical expressions.
4. Add or subtract radical expressions.
5. Multiply radical expressions & simplify.
6. Use the conjugate form to rationalize a denominator with a radical.
7. Solve equations involving roots. Check for extraneous solutions.
8. Solve applications involving the Pythagorean Theorem.
9. Perform operations with Complex numbers.
10. Solve quadratic equations with real or complex solutions.

    - Take the square root of both sides.
    - Completing the square.
    - Quadratic formula.

11. Finding the distance between two non-vertical and non-horizontal points on the coordinate plane.
12. Graph a function involving radicals and determine the domain and a function value of the function. (See review #5c.)