1st Semester Final Review

<u>Unit 1: Extending the Number System</u>

1. Number Subsets
2. Properties of Exponents
3. Rational Exponents
4. Creating Equations (Focus on Linear and Exponential Equations)

<u>Unit 2A: Quadratic Functions – Representations</u>

5. Adding/Subtracting Polynomials
6. Graphing Quadratics from Standard Form (NOT STORY PROBLEMS)
7. Graphing Quadratics from Vertex Form (NOT STORY PROBLEMS)

<u>Unit 2B: Quadratic Functions – Modeling</u>

8. Creating Quadratic Equations from a given context scenario
    A. Upward Velocity problem
    B. Downward Velocity problem
    C. Maximizing Area
    D. Maximizing Profit
9. Identifying the Axis of Symmetry of a given function
10. Identifying the vertex as a Maxima/Minima and finding its value

<u>Unit 2C: Quadratic Functions – Working with Equations</u>

11. Simplifying Square roots
12. Operations with Complex Numbers
    A. Addition
    B. Subtraction
    C. Multiplication
    D. Division
13. Solving Quadratic Equations
    A. By Square Roots
    B. By Factoring
    C. By Completing the Square
    D. By Quadratic Formula