Mth098 Final Exam Review

- 1. Chapter 1: Basic Concepts
 - a. distributive property and combining like terms (1)
 - b. write a phrase as an algebraic expression (1)
 - c. simplify an expression involving exponents (1)
 - d. write a number in scientific notation (1)
- 2. Chapter 2: Equations and Inequalities
 - a. solve a linear equation (1)
 - b. solve for a variable in a formula (1)
 - c. application problem using a linear equation (1)
 - d. solve a linear inequality (1)
 - e. solve an inequality with absolute value (1)
- 3. Chapter 3: Graphs and Functions
 - a. use the vertical line test (1)
 - b. find the slope of a line (1)
 - c. find an equation for a line (2)
 - d. graph a line (1)
 - e. determine whether an ordered pair is a solution to an inequality (1)
- 4. Chapter 4: Systems of Equations and Inequalities
 - a. solve a system of two linear equations (1)
- 5. Chapter 5: Polynomials and Polynomial Equations
 - a. multiply polynomials (2)
 - b. factor a polynomial (2)
 - c. divide polynomials (1)
 - d. solve a polynomial equation (2)
 - e. find the domain of a function (1)
- 6. Chapter 6: Rational Expressions and Equations
 - a. add/subtract rational expressions (1)
 - b. multiply rational expressions (1)
 - c. divide rational expressions (1)
 - d. simplify a complex rational expression (1)
 - e. solve a rational equation (1)

- 7. Chapter 7: Roots, Radicals, and Complex Numbers
 - a. evaluate an expression involving rational and negative exponents (1)
 - b. simplify a radical (1)
 - c. multiply radicals (1)
 - d. rationalize the denominator (2)
 - e. solve a radical equation (1)
 - f. multiply complex numbers (2)
 - g. divide complex numbers (1)
- 8. Chapter 8: <u>Quadratic Functions</u>
 - a. solve a quadratic equation by completing the square (2)
 - b. solve a quadratic equation using the quadratic formula (2)
- 9. Chapter 10: Conic Sections
 - a. find the distance between two points (1)