Algebra Final Exam Study Guide

Spring 2019

**Topics Include:**

Order of Operations

Equations and Inequalities

Functions

Real Numbers (add, subtract, multiply and divide)

Distributive Property

Combining Like Terms

Absolute Value

Solving Equations – mult-step, variables on both sides

Ratios, rates and percents

Graphing linear equations on the coordinate plane

Graphing horizontal and vertical lines

Graphing using x and y intercepts

Slope

Direct variation

Slope intercept Form

Point-Slope Form

Standard Form

Parallel and Perpendicular Lines

Functions and Relations

Solving Inequalities

Solving Compound Inequalities

Solving Absolute Value Equations

Solving Absolute Value Inequalities

Graphing Linear Inequalities in Two Variables

Solving Linear Systems – Graphing, Substitution, Elimination

Solving Linear Inequalities and Graphing them

Properties of Exponents

Graphs of Exponential Functions

Scientific Notation

Exponential Growth and Decay

Square Roots

Solving Quadratics by Finding by Square Roots

Simplifying Radicals

Graphing Quadratic Functions

Solving Quadratics by Graphing

Solving quadratic equations by the quadratic formula

Polynomials – Adding and Subtracting

Multiplying Polynomials

Special Products of Polynomials

Solving Quadratic Equations in Factored Form

Factoring x2 + bx + c

Factoring ax2 + bx + c

Factoring special products

Factoring cubic polynomials