Chapter 7 Objectives

* Write an inequality with two variables to model a problem situation.
* Graph an inequality with two variables.
* Graph a system of inequalities on the coordinate plane and identify the solution area.

Chapter 8 Objectives

* Graph quadratic functions.
* Identify coefficients in quadratic functions.
* Evaluate quadratic functions.
* Identify the domain and range of a quadratic function.
* Find the line of symmetry of a parabola.
* Find the vertex of a parabola.
* Identify the vertex as the maximum or minimum value.
* Solve quadratic functions using factored equations.
* Interpret solutions to a quadratic as x-intercepts.
* Identify the number of solutions to a quadratic equation using the value of the discriminant.
* Solve quadratic equations using the quadratic formula.
* Analyze a quadratic function as it models a real-life situation.

Chapter 9 Objectives

* Recognize exponents as repeated multiplication of the base number.
* Write numeric values with a base and exponent.
* Use the power of a power property, the power of a product property, and the power of a quotient property to simplify expressions.
* Evaluate expressions with negative and zero exponents.
* Find the nth root of a number.
* Write expressions in radical and rational exponent form.

Chapter 10 Objectives

* Identify the terms and coefficients of polynomials.
* Classify polynomials by the number of terms and their degree.
* Write polynomials in standard form.
* Use the vertical line test to determine if graphed equations are functions.
* Add polynomials by combining like terms.
* Subtract polynomials by distributing subtraction.
* Use an area model to multiply polynomials.
* Use the distributive property to multiply polynomials.
* Use the FOIL pattern to multiply polynomials.
* Factor a greatest common factor from a polynomial.
* Use the product and sum rule to factor polynomials of the form x2 + bx + c.
* Use guess and check to factor polynomials of the form

ax2 + bx + c.