**7.1 Graphing Quadratic Functions in Vertex Form**

Objective 1: Know the vertex form of a quadratic function.

Objective 2: Graph a quadratic function in vertex form. (#4, 8, 14, 18, 20)

Objective 3: Find the domain and range of a quadratic function. (#28, 30, 32)

Objective 4: Find a quadratic model in vertex form. (#33)

**7.2 Graphing Quadratic Functions in Standard Form**

Objective 1: Graph a quadratic function in standard form by using the vertex formula to find the vertex. (#12, 16, 24, 26)

Objective 2: Find the minimum or maximum value of a quantity. (#48, 50, 56)

**7.3 Using the Square Root Property to Solve Quadratic Equations**

Objective 1: Use the square root property to solve quadratic equations. (#26, 32, 36, 40, 60, 64, 66, 68)

Objective 2: Make predictions with a quadratic function in vertex form. (#70)

**7.4 Solving Quadratic Equations by Completing the Square**

Objective 1: Know the relationship between b and c in a perfect-square trinomial of the form $x^{2}+bx+c$. (#3, 10)

Objective 2: Solve quadratic equations by completing the square. (#18, 28, 30, 34, 38, 46)

Objective 3: Know that any quadratic equation can be solved by completing the square.

**7.5 Using the Quadratic Formula to Solve Quadratic Equations**

Objective 1: Solve quadratic equations by using the quadratic formula. (#8, 12, 14, 16, 32, 36, 38)

Objective 2: Use the discriminant to determine the number and type of solutions of a quadratic equation. (#64, 66, 68)

Objective 3: Decide which method to use to solve a quadratic equation. (#40, 42, 44, 48, 56, 60, 62)

Objective 4: Use the quadratic formula to make predictions with a quadratic model. (#74)

**7.6 Finding Quadratic Functions (Solving Systems in 3 Variables)**

Objective 1: Find a quadratic equation, in standard form, of a parabola that contains three given points. (#18, 22, 28, 30, 34)

**7.7 Finding Quadratic Models**

Objective 1: Find an equation of a quadratic model in standard form. (#6, 8, 10, 11, 12)

Objective 2: Determine whether a linear function, an exponential function, a quadratic function, or none of these can be used to model a situation. (#1)

**7.8 Modeling with Quadratic Functions**

Objective 1: Use a quadratic model to make estimates and predictions.(#2, 4, 8)

Objective 2: Estimate the maximum or minimum value of a quantity. (#2, 4)

Objective 3: Use a system of two quadratic equations to make estimates and predictions. (#10)

Objective 4: Find the maximum revenue of a business venture. (#14, 16)