STATION #1 – QUADRATIC FUNCTIONS & TRANSFORMATIONS

Describe how the following functions were translated from the function

1. 2.

Identify the axis of symmetry, the min or max, and the domain and range of each function.

3. 4.

Write in Standard form:

5. y = 3(x + 1)2 - 5

STATION #2 – STANDARD FORM

Identify the vertex, axis of symmetry, min or max, and domain and range of the following functions.

1. 2.

3. Find the vertex and y-intercept.

4. What is the x value of the vertex in the equation?

STATION #3 – FACTORING

Factor the following polynomials completely.

1.

2.

3.

4.

5.

STATION #4 – SOLVING QUADRATIC EQUATIONS

Solve the following quadratic equations by factoring.

1. 2.

3.

Solve the following quadratic equations using your graphing calculator. Round to two decimal places.

4.

5.

STATION #5 – COMPLETEING THE SQUARE

Solve each quadratic equation by completing the square.

1. 2.

3.

4. Put into vertex form, by completing the square.

5. What values of *k* would make this a perfect square trinomial?

STATION #6 – THE QUADRATIC FORMULA

Solve each equation using the Quadratic Formula.

1.

2.

Evaluate the discriminant for each equation and determine the number and types of roots.

3.

4.