**Solving Quadratic Equations in Standard Form**

We will explore a method for finding the *x*-intercepts for any quadratic function given in general form, . In other words we will learn how to solve any quadratic equation of the form .

Here are the steps:

1. Find the *x* coordinate of the vertex using the formula .
2. Substitute the value *h* into the function to find the value of the *y*-coordinate of the vertex, which we call *k*.
3. Rewrite the function in vertex form as .
4. Set *y* = 0 and solve the equation of *x* using the method of undoing learned in this investigation.

There are other methods for solving quadratic equations, which you will learn later in this unit.

For now, on a separate piece of paper, use the above method to solve these equations.

1. 

2. 

3 

4. 

5. 

6. 

7. 