Factoring Quadratics: 3 Methods

**6 = 1\*6, 2\*3, -1\*-6, -2\*-3**

**2+3 = 5**

**(x+2)(x+3)**

**Method 3: Difference of Two squares**

1. **Check if the two terms are perfect squares**
2. **Check for subtraction**
3. **Write in factored form as the square roots of each term, added and subtracted.**

**Method 2: Factoring Perfect Square Trinomials**

A perfect square is a number with a square root which is an integer or variable.

1. **Check if the first and third terms are perfect squares.**
2. **Check to see if the second term is two times the square roots found in step 1**
3. **Write in factored form as the square root of the first and last terms.**

Note: Watch for negative numbers, the square roots can be negative

**Method 1: In the form ax2 + bx + c**

1. **Determine the factors of c**
   1. **Both positive and negative**
2. **Determine the set of factors that add up to the b term.**
3. **Rewrite in factored form using factors.**

Note: If there are no factors of c that add up to b, the factors are decimals.