Zero Product Property

- 1. Place everything on one side and zero on the other side.
- 2. Factor completely
- 3. Set each factor equal to zero
- 4. Solve the resulting equation

$$x^2 = n, x = \pm n$$

- 1. Isolate the squared term
- 2. Take square root of both sides
- 3. Solve the 2 resulting equations

Completing the Square

The coefficient of the quadratic term must be 1

- 1. Place the constant on the other side of the equation
- 2. Take half the middle term and square it
- 3. Add that result to both sides of the equation
- 4. Factor
- 5. Solve the resulting equation

Quadratic Equation

- 1. Place everything on one side of the equation, zero on the other side
- 2. Identify a, b and c
- 3. Substitute those values into the Quadratic Formula
- 4. Simplify