Quadratic Expressions Special Patterns and Factors

Difference of Perfect Squares:

$$a^2 - b^2 = (a + b)(a - b)$$

Perfect Square Trinomial (plus pattern):

$$a^{2} + 2ab + b^{2} = (a + b)^{2} = (a + b)(a + b)$$

Perfect Square Trinomial (minus pattern):

$$a^2 - 2ab + b^2 = (a - b)^2 = (a - b)(a - b)$$