Factoring out a Common Term of a Polynomial

$$3x^2 + 12x$$

$$4x^2 + 16x + 4$$

$$2x^2 + x$$

$$-2x + 7$$

$$-5x^2 - 15x + 20$$

Factoring Quadratics in the form of $Ax^2 + Bx + C$; where "A" = 1.

$$x^2 + 5x + 6$$

$$x^2 - 13x - 30$$

$$x^2 - 7x + 10$$

$$x^2 + 3x + 5$$

Factoring Quadratics in the form of $Ax^2 + Bx + C$; where "A" DOES NOT = 1.

ALWAYS NEED TO CHECK FOR A COMMON FACTOR FIRST

$$2x^2 + 13x + 15$$

$$9x^2 + 21x + 6$$

$$-x^2 + 7x + 8$$

$$-6x^2 + 3x + 18$$

Factoring the Difference of Two Squares

$$A^2 - B^2 = (A - B)(A + B)$$

$$x^2 - 16$$

$$4x^2 - 49$$

$$3x^2 - 75$$

$$-x^2 + 4$$

Factoring the Difference Perfect Square Trinomials

$$x^2 + 4x + 4$$

$$4x^2 - 12x + 9$$

$$-25x^2 - 10x - 1$$