

$$(x+5)^2$$

~~$$(x+5)^2$$~~

$$(x+5)(x+5)$$

$$x^2 + 5x + 5x + 25$$

$$x^2 + 10x + 25$$

$$(x+7)^2$$

$$x^2 + 14x + 49$$

$$(x+7)(x+7)$$

$$x^2 + 7x + 7x + 49$$

$$x^2 + 14x + 49$$

$$(x+3)^2$$

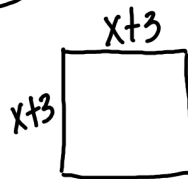
$$x^2 + 6x + 9$$

Perfect Square
Trinomial

$$(x+3)(x+3)$$

$$x^2 + 3x + 3x + 9$$

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



$$(x+4)(x-4)$$

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

$$x^2 - 16$$

$$(x+5)(x-5)$$

$$x^2 - 5x + 5x - 25$$


$$x^2 - 25$$

$$(x+9)(x-9) \quad | \quad (x-9)(x+9)$$


$$x^2 - 81$$

$$x^2 - 81$$

~~Difference~~ of the Squares
 $x^2 - 9^2$


$$4(x^2 + 3x - 5)$$

$$4x^2 + 12x - 20$$


$$2x(x^2 - 7x + 1)$$

$$2x^3 - 14x^2 + 2x$$

Factors

$$2 \cdot 3 = 6$$

2, 3

Product 6

Factor

$$\Rightarrow 2x^2 + 10x + 8$$

Greatest
Common
Factor

$$2(x^2 + 5x + 4)$$

$$\frac{2x^2}{2}$$

$$\frac{5 \cdot 10x}{2}$$

$$\frac{8}{2}$$

$$\rightarrow 2(x^2 + 5x + 4)$$

$$4x^3 + 20x^2 - 36x$$

$$4x(x^2 + 5x - 9)$$

GCF

$$3x^2 - 12x + 3$$

$$3(x^2 - 4x + 1)$$

$$2n^2 + 4$$

$$2(n^2 + 2)$$

$$3r^2 + 21r^4$$

$$3r^2(1 + 7r^2)$$

$$2p^2q - 8pq^2 + 4pq$$

$$2pq(p - 4q + 2)$$

$$9x^3y^2 - 21x^2y + 24xy^2$$

$$3xy(3x^2y - 7x + 8y)$$

p450

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