

R1.5

Monomial $x, 5, 3a$
one term

Binomial $4x+1$
two terms

Trinomial x^2+5x+6
three terms

Polynomial

$$a_n x^n + \dots + a_2 x^2 + a_1 x + a_0$$

$$3x^5 + 7x^4 - 2x^3 + 5x^2 - x + 6$$

Degree of polynomial

5

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

Polynomial Degree 3
cubic

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

Trinomial Degree 2
Quadratic

$$x^2 y + 4xy^2 - 2xy + 5x$$

$$(4x^2 + 3x - 1) + (7x^2 - 5x - 8)$$

Add
Like
Terms

$$11x^2 - 2x - 9$$

$$(5a^2 - 2a - 4) - (a^2 - 7a + 1)$$

$$4a^2 + 5a - 5$$

$$5a^2 - 2a - 4 - a^2 + 7a - 1$$

$$(x+4)(x-3) \quad \text{FOIL}$$

$$x^2 - 3x + 4x - 12$$

$$x^2 + x - 12$$

$$(x+3)^2 \quad x^2 + 6x + 9$$

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

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

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

$$(x-3)^2 \quad x^2 - 6x + 9$$

$$(x-3)(x-3)$$

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

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

$$x^2 - 25$$

Difference
of the
Squares

$$(x+2)^3$$

$$[(x+2)(x+2)](x+2)$$

$$[x^2 + 4x + 4](x+2)$$

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

$$x^3 + 4x^2 + 4x + 2x^2 + 8x + 8$$

$$x^3 + 6x^2 + 12x + 8$$

$$(\sqrt{x} + \sqrt{y})^2$$

$$(\sqrt{x} + \sqrt{y})(\sqrt{x} + \sqrt{y})$$

$$x + \sqrt{xy} + \sqrt{xy} + y$$

$$x + 2\sqrt{xy} + y$$

PR47

57

$$1200(1.06)^4 + 1400(1.06)^3 + 800(1.06)^2 + 2300(1.06) + 2900$$