

Polynomial

Nth degree polynomials can be represented as:

$$P_n(x) = a[0]x^n + a[1]x^{(n-1)} + a[2]x^{(n-2)} + \dots + a[n]x^0$$

n : Degree of the polynomial.

a[i] : Constants of the polynomial. (i = 0, 1, ..., n)

$$P_n(x) = \sum_{i=0}^n a[i]x^{(n-i)}$$

$$P_o(x) = a[0]x^0$$

$$P_n(x) = (\dots((a_0(x) + a_1)x + a_2)x + \dots + a_{(n-1)})x + a_n$$

$$P_{(n)}(x) = P_{(n-1)}(x)x + a_{(n)}$$

$$P_0 = a_0$$