

Polynomial function

a function whose function rule is defined as a polynomial.

$$f(x) = 4x^2 - 6x + 1$$

$$g(x) = -x^4 + 2x^3 + 8x^2 - 3$$

$$h(x) = 2x^3 - 3$$

Determine the value of $f(x)$ at a particular value of x .

Method 1: Substitute x into **function** to evaluate.

$$f(x) = 3x^2 + 4x - 8$$

find $f(2)$

find $f(-4)$

find $f(3)$

Determine the value of $f(x)$ at a particular value of x .

Method 2: Use synthetic substitution to evaluate.

$$f(x) = 3x^2 + 4x - 8$$

find $f(2)$

find $f(-4)$

find $f(3)$

Determine the value of $f(x)$ at a particular value of x .

Method 1: Substitute x into **function** to evaluate.

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

find $f(2)$

find $f(-3)$

find $f(4)$

Determine the value of $f(x)$ at a particular value of x .

Method 2: Use synthetic substitution to evaluate.

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

find $f(2)$

find $f(-3)$

find $f(4)$

Polynomial function

a function whose function rule is defined as a polynomial.

$$f(x) = 4x^2 - 6x + 1$$

$$g(x) = -x^4 + 2x^3 + 8x^2 - 3$$

$$h(x) = 2x^3 - 3$$

Determine the value of $f(x)$ at a particular value of x .

Method 1: Substitute x into **function** to evaluate.

Method 2: Use synthetic substitution to evaluate.