

Evaluate the
following

$$\begin{aligned} 1) f(x) &= 2x^3 - 4x^2, x = -2 \\ &= 2(-2)^3 - 4(-2)^2 \\ &= 2(-8) - 4(4) \\ &= -16 - 16 \\ f(-2) &= -32 \end{aligned}$$

$$\begin{aligned} 2) f(x) &= 3x^{10} + 7x^8 - 4x^5, x = -1 \\ &= 3(-1)^{10} + 7(-1)^8 - 4(-1)^5 \\ &= 3(1) + 7(1) - 4(-1) \\ &= 3 + 7 + 4 \\ f(-1) &= 14 \end{aligned}$$

Combining Like Terms

$$\text{ex) } 7x + 8x^2$$

you can only combine
when the variables and
exponents are the same

$$\text{ex 1) } f(x) = \boxed{3x^2} - 5 + 7x + \boxed{6x^2}$$

$$f(x) = 9x^2 + 7x - 5$$

Quadratic Trinomial

Leading Coefficient: 9

$$\text{ex 2) } f(x) = \boxed{6x^2} - 7x^3 - \boxed{4x^2} - 9$$

$$f(x) = -7x^3 + 2x^2 - 9$$

Cubic Trinomial

Leading Coefficient = -7

ex3) $\boxed{16x} - \boxed{3x} + \boxed{4y} - \boxed{2y} + \boxed{2x}$

$$15x + 2y$$