

M2H: +, -, x Polynomials

EX. $(1 - 9x + 8x^2) + (2x^2 + 5 - 6x)$

+/- : need like terms!

$$10x^2 + 6 - 15x \rightarrow \boxed{10x^2 - 15x + 6}$$

EX. $(-x - 10 + 15x^2) - (1 + 9x^2 - 8x)$

$-x - 10 + 15x^2 - 1 - 9x^2 + 8x$

$$6x^2 + 7x - 11 \rightarrow \boxed{6x^2 + 7x - 11}$$

EX. $4x^3(2x^2 - 8x + 7)$

Monomial x Polynomial

x : Distribute every term to every other term

$$8x^5 - 32x^4 + 28x^3 \rightarrow \boxed{8x^5 - 32x^4 + 28x^3}$$

EX. $(x+9)(x-4)$

$$x^2 - 4x + 9x - 36$$

$$\rightarrow \boxed{x^2 + 5x - 36}$$

EX. $(5x-7)(x-4)$

$$5x^2 - 20x - 7x + 28$$

$$\rightarrow \boxed{5x^2 - 27x + 28}$$

EX. $(8x+2y)(3x+y)$

$$24x^2 + 8xy + 6yx + 2y^2$$

Combine!

$$\rightarrow \boxed{24x^2 + 14xy + 2y^2}$$