

March 28, 2017

Multiplication of Polynomials

$$(2x^2 - 5)(3x^3 + 2x^2 - x + 9)$$

$$6x^5 + 4x^4 - 2x^3 + 18x^2 - 15x^3 - 10x^2 + 5x - 45$$

$$6x^5 + 4x^4 - 17x^3 + 8x^2 + 5x - 45$$

Mar 28-9:03 AM

$(a+b)^2 \neq a^2 + b^2$

*We don't know the meaning of exponents!*

$$(a+b)^2 = (a+b)(a+b)$$

$$= a^2 + ab + ba + b^2$$

$$= a^2 + 2ab + b^2$$

Mar 28-9:12 AM

$$(3x-5)^2 = (3x-5)(3x-5)$$

$$= 9x^2 - 15x - 15x + 25$$

*like*

$$= 9x^2 - 30x + 25$$

$$(3x-5)^3 = (3x-5)(3x-5)(3x-5)$$

$$= (9x^2 - 30x + 25)(3x-5)$$

$$= 27x^3 - 45x^2 - 90x^2 + 150x$$

$$= 27x^3 - 135x^2 + 150x - 125$$

*Cubed*      *Cubed*

Mar 28-9:17 AM

$$(-5y^2 + 2)^4$$

\*  $(5x-4)^5$  *Do tomorrow!*

Mar 28-9:34 AM