

BE-1B | MONDAY 11-5-07

Simplify:

① $-4.6wz^3 + 2.4z^2 + 0.8z^2 - 3.4wz^3$

② $5(t^2 - 3) + 2(t^2 - 4)$

③ $8m^2 - 4(m^2 - n^3) + n^3$

- ④ DEFINE:
- Ⓐ MONOMIAL
 - Ⓑ POLYNOMIAL
 - Ⓒ domain
 - Ⓓ RANGE

~~~~~ AHSGE WB ~~~~~

① Pg. 30 # 4

④ NOT in WB  
(see text book)

② Pg 30 # 5

③ Pg 30 # 6

• Hand in "late work" or "absent work".

# Ch 8-5

## Adding/Subtracting Polynomials

Ex  $(3x^2 - 4x) + (2x^2 + 6)$

$$\underline{\underline{3x^2}} - 4x + \underline{\underline{2x^2}} + 6$$

$$\boxed{5x^2 - 4x + 6}$$

Ex  $-(2x + 4) + (3x - 8)$

$$\underline{\underline{-2x}} - 4 + \underline{\underline{3x}} - 8$$

$$\boxed{x - 12}$$

Ex  $(2x^4 + 3x^3 - 6) - (2x^3 - 4)$

$$\underline{\underline{2x^4}} + \underline{\underline{3x^3}} - 6 \quad \underline{\underline{-2x^3}} + 4$$

$$\boxed{2x^4 + x^3 - 2}$$

# Ch 8-6

Multiplying A Polynomial by a Monomial

Ex)  $5x^4y^2(2x^2y - 3xy + 6)$

$$5x^4y^2(2x^2y - 3xy + 6)$$

$$10x^6y^3 - 15x^5y^3 + 30x^4y^2$$

By using the distributive property, you end up just multiplying a lot of monomials • monomials.

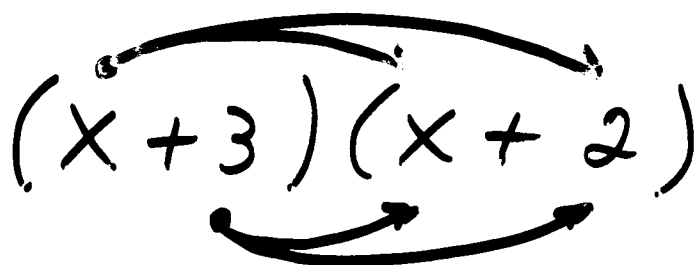
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It is the same when you multiply polynomials times polynomials.

## Ch. 8-7 Multiplying Polynomials

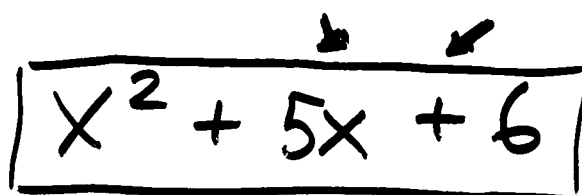
Of all the possible combinations you see when multiplying a poly • poly, we will start off with one you will see most often, a binomial • binomial.

(EX)  $(x + 3)(x + 2)$



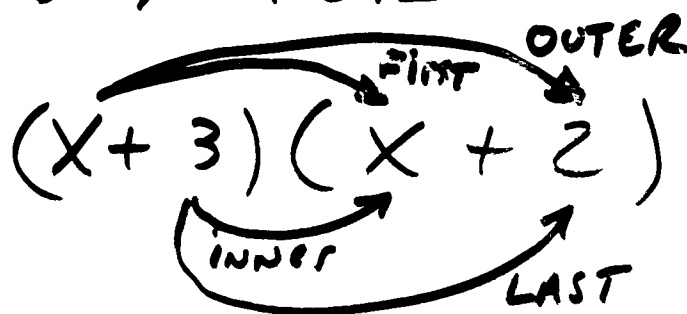
$$(x + 3)(x + 2)$$

$$x^2 + 2x + 3x + 6$$



$$\boxed{x^2 + 5x + 6}$$

This is example 1 on Page 452,  
Memory Aid  $\Rightarrow$  "FOIL"



$$(x + 3)(x + 2)$$

Ex - Pg 453 # 2

①  $(x-5)(x+7)$

$(x-5)(x+7)$

$x^2 + 7x - 5x - 35$

$x^2 + 2x - 35$

②  $(2y+3)(6y-7)$

$12y^2 - 14y + 18y - 21$

$12y^2 + 4y - 21$

① Ex  $(2x+3)(x^2+5x+1)$

$(2x+3)(x^2+5x+1)$

$$2x^3 + 10x^2 + 2x$$

$$+ 3x^2 + 15x + 3$$

$$\boxed{2x^3 + 13x^2 + 17x + 3}$$

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### Homework

- Read Ch 8-7
- Pg 455 # 4 to 10