Alg. 1A - BE | Tuesday 4-19-11

1. $x(x+3) = ?$

2. $2x(5x-2) = ?$

3. $(x^2+3x) - (10x^2 - 4x) = ?$

- Homework Review
  Pg 446 3-11 odd

Multiplying Polynomials ⇒ Ch. 8-7

Lets start with a (binomial)•(binomial)

Ex 1 Pg 452 $(x+3)(x+2)$

Draw an arrow from each monomial in the first binomial

$(x+3)(x+2)$ 4 multiplications

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

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

Ex 2 (A) Pg 453 $(x-5)(x+7)$

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

$\boxed{x^2 + 2x - 35}$

Ex 2ⓑ Pg 453 $(2y+3)(6y-7)$

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

$\boxed{12y^2 + 4y - 21}$

Now, lets try a (binomial)•(trinomial).

A vertical layout is convenient.

Ex 4Ⓐ Pg 454 $(4x+9)(2x^2-5x+3)$ 6 multiplications

$8x^3 - 20x^2 + 12x$ ← Leave on this line.

$+18x^2 - 45x + 27$ ← Use new line. Line up like terms!

$\boxed{8x^3 - 2x^2 - 33x + 27}$ Done!

(Ex) $(3x+4)(x^2-12x+1)$

$3x^3 - 36x^2 + 3x$

$+ 4x^2 - 48x + 4$

$\boxed{3x^3 - 32x^2 - 45x + 4}$

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

$6x^3 + 12x^2 - 9x$

$-10x^2 - 20x + 15$

$\boxed{6x^3 + 2x^2 - 29x + 15}$

FINALLY, A (TRINOMIAL) • (TRINOMIAL)

EX (46)
PG 454

$(y^2 - 2y + 5)(6y^2 - 3y + 1)$

NINE MULTIPLICATIONS

$6y^4 - 3y^3 + y^2$

$-12y^3 + 6y^2 - 2y$

$+30y^2 - 15y + 5$

$6y^4 - 15y^3 + 37y^2 - 17y + 5$

HOMEWORK: Pg. 455 # 13, 16, 19, 31, 32, 37