

Alg. 1A - BE TUESDAY 4-20-10

$$\textcircled{1} \quad x(x+3) = ?$$

$$\textcircled{2} \quad 2x(5x-2) = ?$$

$$\textcircled{3} \quad (x^2 + 3x) - (10x^2 - 4x) = ?$$

• Homework Review
Pg 446 3-11 odd

Multiplying Polynomials $\Rightarrow$ Ch. 8-7

Lets START WITH A (binomial) • (binomial)

EX1
pg 452

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

Draw AN arrow FROM EACH
MONOMIAL in the first binomial

$$(x+3)(x+2) \quad 4 \text{ multiplications}$$

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

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

EX2A
pg 453

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

$$x^2 + \underline{7x} - \underline{5x} - 35$$

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

Ex 26
Pg 453

$$(2y+3)(6y-7)$$

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

$$(12y^2 + 4y - 21)$$

Now, let's try a (binomial) • (trinomial).

A VERTICAL LAYOUT IS CONVENIENT.

Ex 4A
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!

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

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

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

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

$$3x^3 - 32x^2 - 45x + 4$$

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

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

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

$$6x^3 + 2x^2 - 29x + 15$$

Finally, a (trinomial) • (trinomial)

EX(46)
PS 454

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

NINE
MULTI-
PLICATIONS

$$\begin{aligned} &6y^4 - 3y^3 + y^2 \\ &\quad - 12y^3 + 6y^2 - 2y \\ &\quad\quad + 30y^2 - 15y + 5 \end{aligned}$$

$$\boxed{6y^4 - 15y^3 + 37y^2 - 17y + 5}$$

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