Happy Friday!

1) Find your normal seat and take everything out of the folder that is yours. Then return your group folders.

2) New Seats (Ms. Stilson will read out)

No, I don't have the quizzes graded yet.

Do Now: Ask your neighbors how they are and record their thoughts.

Awareness Video

Instructional Focus:

IF.3 I can add, subtract and multiply polynomials

How do we write addition?

1 plus 1 $a+b$ order does not matter

$1+1$ $b+a$

How do we write subtraction?

1 minus 1 $a-b$ order does matter

$1-1$ $b-a$

How do we write multiplication? $2*3$

$(2)(2)$ $5(x+y)$

$5x$

5×5 $2\cdot2$ 2^2 ab

order does not matter

$5(4)$ $5(4)$

$(5)4$ $(4)5$

$5\sqrt{-25}$

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

$(a+b)(c+d+e)$

$ac+ad+ae+bc+bd+be$

ca

Simplify

(2)(3)(4)

24

(2)(x)(x-5)

$2x(x-5)$

$2x^2-10x$

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

$(x+1)(x+1)$

x^2+2x+1

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

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

Does order matter when you multiply?

Select an example from above and prove your conjecture to me!

Adding

To add polynomials, simply combine like terms

- things that are alike (have the same exponent)

$(2x^3 - 4x^2 + 5x) + (5x^3 - 4x + 1)$

$7x^3 - 4x^2 + x + 1$

I do

$(2t^3 + t - 4t^2) + (-2t^3 + 4t^2 + 1)$

$0t^3 + t + 0t^2 + 1$

$t + 1$

We do

#5 on your worksheet

$(-7 - p^4 + 13p^5) + (2p^4 + 13 + 3p^5)$

$6 + 1p^4 + 16p^5$

You Do

Subtracting Polynomials

To subtract polynomials, simply distribute the negative and then ADD

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

$5x^3-4x+5-5x^2+4x-x^2$

$5x^3+5-6x^2$

I do

$(10y^4+y-4y^2)+(+2y^3-4y^2-1)$

$10y^4+y-4y^2+2y^3-4y^2-1$

$10y^4+y-8y^2+2y^3-1$

We do

#2 on worksheet

You do

$(2b+1)+(b^2-6+2b)$

$2b+1-b^2-6+2b$

$4b-5-b^2$

$-b^2+4b-5$

Multiplying Polynomials

To multiply polynomials, use the distributive property , then combine like terms.

$(4-1x)(5x^3+2x^2-7)$

$-1x(5x^3)=-5x^4$

I do

$20x^3+8x^2-28\quad -5x^4-2x^3+7x$

$(x+1)(2x-1)(x-3)$

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

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

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

We do

$2x^3+x^2-x\quad -6x^2-3x+3$

$2x^3-5x^2-4x+3$

You do. Pick 1!

$(a+b)^3$

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

By the way...what is a polynomial?

binomial 2

$x+1$

Exit Slip!

1) $(19x^2 + 12x + 12) + (7x^2 + 10x + 13)$

2) $(17x^2 + 7x - 14) - (-6x^2 - 5x - 18)$

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

Homework: Ops with Polys WS - ALL