Secondary 2
Lesson 0.4

ADDING & SUBTRACTING POLYNOMIALS

Objective:

Learn vocabulary
Combine like terms
Write in standard form (descending order)

Vocabulary	$-3x^2 + 4 + 5x^3 - x$	$-4x + 6x^5$	$9xy - 3x^2y - 4y^2$
Number of terms			
Coefficients			
Variables			
Degree of each term			
Degree of Polynomial			
Lead Coefficient			
Standard form			
Classify by degree			
Classify by number of terms			

ADDING & SUBTRACTING POLYNOMIALS

Take care of any parenthesis
Combine like terms
Write in standard form (descending order)

$8w^2x + 2w^2x$

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

$(3x^2 - 4x + 1) + (x^2 - 6)$

ADDING & SUBTRACTING POLYNOMIALS

Take care of any parenthesis
Combine like terms
Write in standard form (descending order)

$5bc^4 - 13bc^4$

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

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

IS IT A POLYNOMIAL? AND WHAT IS CLOSURE?

A Polynomial is one or more monomials added/subtracted, where the exponents are _____

Is this a Polynomial? Why or why not?

- $x^{1/2} + 6x^2$
- $9 - \frac{1}{4}x^2$
- $8x^3 + 3x^{-2} - 7x + 3$
- $2x + 7$
- $(x - 2)(x + 5)$

CLOSURE

Do you end up with the same type of thing after the operation?

- Are Polynomials closed under ADDITION? _____
- Are Polynomials closed under SUBTRACTION? _____
- Are Polynomials closed under MULTIPLICATION? _____
- Are Polynomials closed under DIVISION? _____

Classifying Polynomial	Degree	Name Using Degree	Number of terms	Name Using # of terms
6				
$5x + 9$				
$4x^2 + 7x + 3$				
$2x^3y$				
$x^3 - 2x^2 + 3x - 2$				
$3x^2y^2 + x^2y$				

Wrap up

Can you find Coefficients of a polynomial?
Can you find the Degree of terms and polynomials?
Can you write a polynomial in Standard Form?
Can you add and subtract polynomials?
Can you classify a polynomial by the terms and degrees?

Assignment:

Packet 0.4
And 0.4 MathXL

Due next class!

***Special Note: Stay current. It's hard to catch up.**