April.27th, 2016

Unit 5 Day 2
5-2 Polynomials and Degree

Polynomial

1 or more algebraic terms separated by +− signs

monomial	binomial	trinomial
single term	two terms	three terms
ex. $4x$	ex. $3x-7$	$6a^2-a+5$
$-7x^2y$	$5a^2b+a^2$	$3x^2y^3+y^2+y$
$11x^3y_2$		

* Polynomials may have 4 or more terms.
* Polynomials may NOT have exponents other than positive integers (whole #s)

Each polynomial has a degree, determined by adding the exponents of the variables for the term with the highest degree.

ex.	Degree
$4x$	1
$-7x^2$	2
$5a^2b+c^2$	3
$16x^2y^2-5xy$	4
12	0 $(12x^0)$

Polynomials should be written in descending degree order, alphabetically.

Incorrect	Correct
$3x^2+7x^3-12$	$7x^3+3x^2-12$
$7-3y+2x$	$2x-3y+7$

Adding + Subtracting Polynomials

1) $(5x-2)-1(7x+2)$ * Distribute the negative sign

$=5x-2-7x-2$

$=-2x-4$

2) $(3x^2-3x+4)-(-3x^2+6x-7)$

$=3x^2-3x+4+3x^2-6x+7$

$=6x^2-9x+11$

3) $(3x-5)-(2x+5)+(-7x+3)$

$=3x-5-2x-5-7x+3$

$=-6x-7$

Practice 5-2