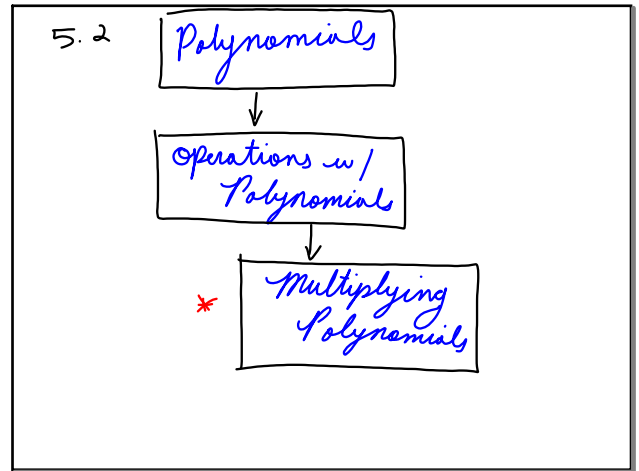


October 17, 2016  
 \* Quiz #6 - Wednesday  
 3.1 - 5.1

Oct 17-9:52 AM



Oct 17-10:03 AM

Polynomials

\* Term: is a number, called a constant or coefficient, or the product of a number and one or more variables.

5,  $5x$ ,  $-16x^3y^3$

↓  
Coefficient

Oct 17-10:06 AM

\* The Degree of a Term: is the sum of all exponents of variables

$2x^3y^5$   
 Degree:  $3+5=8$

$5x^1$  Degree: 1

$5x^0$  Degree: 0

FACT:  $x^0 = 1$   
 $*(anything)^0 = 1$

Oct 17-10:12 AM

$2^3 x^2 = 8x^2$

Degree: 2

Oct 17-10:16 AM

\* Monomial: a one term Polynomial  
 "one"  $x^2, -2, 5x^3y^3$

\* Binomial: a two term Polynomial connected by "+" or "-"  
 "two"  $2x + 4y, x - 3, 5x^3y^3 - 2$

\* Trinomial: a three term Polynomial connected by "+" or "-"  
 "three"  $x^2 - 5x + 6, 2x + 3y - 4$

\* Polynomial: a many term Polynomial.  
 "many"  $5x^4 - 2x^3 + 3x^2 - x + 9$

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\* Degree of a Polynomial:  
is the degree of the largest term.

$$\boxed{-2x^3} - 2x^2 + 15x - 8$$

→ Degree: 3

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$$\left. \begin{matrix} x^1 \\ x^2 \end{matrix} \right\} \text{easy to solve}$$

$$x^3 \text{ easy or difficult}$$

$$x^4 \text{ //}$$

$$x^{3+} \text{ we have no means to solve}$$

Oct 17-10:30 AM

Write polynomial in  
Descending order from  
highest to lowest.

$$\boxed{2x^2 - 3x + 5x^3}$$

$$\boxed{5x^3 + 2x^2 - 3x}$$

3 → 2 → 1

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$$\boxed{5x^3y^2} + 2x^2y^3 - 5y^3$$

Degree: 5

Oct 17-10:36 AM

Do 5.1 & 5.2

5.3 Addition of Polynomials

$$3x + 4x$$

Like Terms {

- Same degree of terms: 1
- Same Exponents: 1
- Same Variable: x

\* Like terms can be added (Combined)

$$x(3+4) = 3x + 4x$$

$$x(7)$$

$$7x$$

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$$3x + 4y \text{ can not be added!}$$

$$3x^2 + 4x = x(3x + 4)$$

not like

Oct 17-10:44 AM