

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

Oct 17-9:06 AM

$$f(x) = -2x^2 + 3x + 2$$

Input

$$f(3) = -2(3)^2 + 3(3) + 2$$

Input

$$= -2(9) + 9 + 2$$

$$= -18 + 9 + 2$$

$$= -9 + 2$$

$$= -7$$

$f : x \rightarrow -2x^2 + 3x + 2$
 $f : 3 \rightarrow -7$

if $f(x) = y$, then
 $y = -7$

Oct 17-9:11 AM

$$f(x) = |9x - 6|$$

$$f(4) = |9(4) - 6|$$

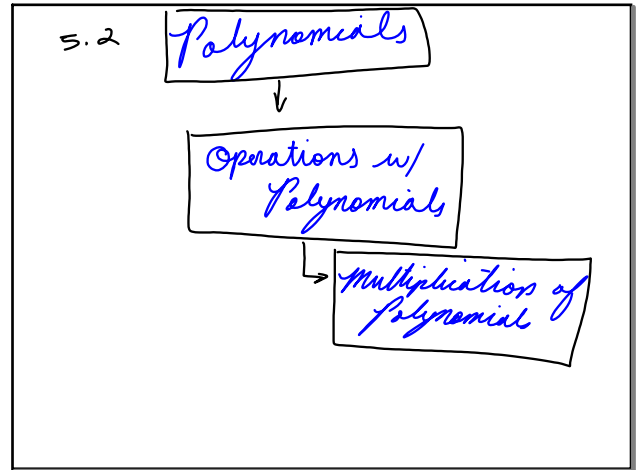
$$= |36 - 6|$$

$$= |30|$$

$$= 30$$

$f : 4 \rightarrow 30$

Oct 17-9:17 AM



Oct 17-9:19 AM

Polynomials

* Term: is a number or the product of a number and one or more variables.

-9 (Coefficient Constant), $-9x$ (Coefficient), $2x^2y^3$ (Coefficient)

* Degree of a Term: is the sum of the exponents of the variables.

$2x^2y^3 \rightarrow 2+3=5$
 Degree: 5

$-9x \rightarrow$ Degree: 1

$-9x^0 \rightarrow$ Degree: 0

FACT: $x^0 = 1$

Oct 17-9:21 AM

* Monomial: one term
 "one"
 $5, -12y^{18}, x^2$

* Binomial: two term
 "two"
 Polynomial where terms are connected by addition/subtraction
 $3x + 4y, 4x^2 - 2x, x - 2, y - 8$

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

* Polynomial: a many terms
 "many"
 Polynomial
 $5x^4 - 2x^2 + 3x - 2$

Oct 17-9:32 AM

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

$$5x^3 - 2x^2 + x - 9$$

$n:3 \rightarrow$ therefore, the polynomial degree is 3

$$10x^{12} - 2x^{10}y^3 \quad D:13$$

$D:13$

Oct 17-9:40 AM

x^1
 x^2
 x^3 } easy to solve
 ?

Oct 17-9:44 AM