6.3 Introduction to Polynomials

Monomial			
kx ⁿ			
where n is a whole number.			
n is called the the	of the term, and k is called		

*terms are not monomials when:

Polynomial	Examples:
A polynomial is a monomial or the indicated sum or difference of monomials.	
Theis the largest exponent.	
The coefficient of the term of the largest exponent is called the	

*Write polynomials in descending order from largest exponent to smallest.

Naming Polynomials by the Number of Terms			
<u>Polynomial ex</u>	Number of Terms	Term Name	
8			
2x + 3			
3x ² - 5x + 7			

Simplify and classify the following by degree and number of terms.

a) $5x^3+7x^3$ b) $x^2 + 8x - 15 - x^2$ c) $-3y^4 + 2y^2 + y^{-1}$

Examples:

a) Evaluate $p(x) = 4x^2 + 5x - 15$ for x = 3.

b) Evaluate: $p(y) = y^2 - 5y - 5$

1) Find p (-1) =

2) Find p (3)

c) Given p(x) = 3x-4 evaluate p(2x-1)

This document is 100% funded by the MoSTEMWINs \$19.7 million grant from the U.S. Department of Labor, Employment and Training Administration (TAACCCT). The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.



This MoWINs product was created by North Central Missouri College and is licensed under the Creative Commons Attribution 4.0 International License