

Chapter 6 Polynomials and Polynomial Functions

6-1 Polynomial Functions

Vocabulary polynomial polynomial function
 degree degree of a polynomial
 standard form of a polynomial

Monomial real #, variable, or product of real# and
 variable(s): -5 ; x^3 ; or $3.5xy^2z$,

Coefficient real-number factor

Degree sum of exponents of variables

Simplify

+ or -

combining like terms

ex. $2x + 6 - 5x - 1 + 3x^2 + x$

x

multiply coefficients, + exponents
on 'like' bases

ex. $(2x^3y)(x^2 + 4xy^2)$

Standard form of a Polynomial

when the terms of a polynomial
are written in descending order

ex. $2x^3 - 5x^2 - 2x + 5$

Degree of degree of the term of highest degree

Polynomial ex. $5y^2z + 10xy - 9xz^6 + 6$, degree = 7