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   when the terms of a polynomial
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