Polynomials

Definition: A TERM is a constant, a variable or the product of a constant and one or more variables.

ex) 5   ;   x   ;   7x   & $3xy^2z^3$ are each a single term

Definition: A POLYNOMIAL is a finite sum of terms.

Classifying Polynomials by Number of Terms

Monomial: 1 term polynomial   ex)   8x

Binomial: 2 term polynomial   ex)   3x − 4

Trinomial: 3 term polynomial   ex) $4x^2 + 5x − 2$

Definition: The DEGREE of a polynomial (in only 1 variable) is the highest power to which the variable is raised.

Classifying Polynomials by Degree

	Polynomial	Degree	Special Name
ex)	3x + 5	1	Linear
ex)	$−7x^2 + 4x − 1$	2	Quadratic
ex)	$x^3 − 8$	3	Cubic
ex)	$x^2 + 3x^4 + x − x^3 − 2$	4	
ex)	63	0	Constant
ex)	0	Undefined	Zero