

(PFI) Polynomial Vocabulary

monomial - a number, a variable, or a product of numbers and variables with whole number exponents

ex: $4, x, 3x^2y$

degree of a monomial - the sum of the exponents of the variables (constants have a degree of zero)

ex: $4x^2y^4$ has a degree of 6 ex: $8x$ has a degree of 1

ex: 8 has a degree of zero

polynomial - monomial, a sum or difference of monomials

ex: $4x, 3x+2, 4y^2+2xy+3x, 3x^4-2x^2$

degree of a polynomial - the degree of the term with the greatest degree

ex: $6x^3 + 2x^2 - 4x - 7$ has a degree of 3

standard form of a polynomial with one variable - the terms in order from greatest degree to least degree. When in standard form, the leading coefficient is the coefficient of the first term

ex: ~~$4y^3 - 2y^5 + y^2 - 3y + 2$~~

standard form \rightarrow $-2y^5 + 4y^3 + y^2 - 3y + 2$

leading coefficient: -2

Degree	Name
0	Constant
1	Linear
2	Quadratic
3	Cubic
4	Quartic
5	Quintic
6 or more	6th degree, 7th degree, and so on

Terms	Name
1	Monomial
2	Binomial
3	Trinomial
4 or more	Polynomial