

Fri
9-14-18

Polynomials

Poly- "many"
nomials- "numeric parts"
terms

2x - factors
(things multiplied)

$\frac{2x}{2+x}$ terms- things added
or subtracted

(I) Distinguish by the number of terms

A. $3x \rightarrow$ monomial

B. $5x+7 \rightarrow$ binomial

C. $x^2 + 3x - 14 \rightarrow$ trinomial

(II) Distinguished by their degree. Definition
of a degree - the largest exponent in any
term of the polynomial.

(ex) $7x^5 - 5x^3 + 2x - 9$ Degree of $\frac{?}{?}$ (E)

"Standard Form" - that the terms are in
decreasing order. ($7x^5 - 5x^3 + 2x - 9$ is in S.F.)

"Leading Term" - 1st term when in standard
form. $7x^5 - 5x^3 + 2x - 9 \rightarrow \boxed{7x^5}$

"Leading Coefficient" - coefficient of the leading term
 $7x^5 - 5x^3 + 2x - 9 \rightarrow \boxed{7}$

To be a polynomial exponents are positive
integers. Integers (+) = $\{1, 2, 3, 4, \dots\}$