An Overview of Fundamental Algebra * Page 1
Grouping (Classify) & Order (Categorize) is very Important for Learning
An Algebraic Term is a single unit without Addition or Subtraction!
Simplify Expressions & Formulas!   Solve Equations & Inequalities!

Monomials   Algebraic terms consisting of one: constants, variables, products, quotients!

Constant	Variable	Product	Quotient
1,2,3,…	a,b,c,…	2a, 5b, 7c, …	e/3, g/6, m/8, …

Binomials   Algebraic expression consisting of two terms: Addition or Subtraction

Constant & Variable		Variable & Variable	
r + 5	s - 6	3x + y	p – q/4

Trinomials   Algebraic expression consisting of three terms: Addition and/or Subtraction

Variables & Constants		Products & Quotients	
c + 3/b – a	p – q + 4s	7w + r – 2/e	3 – w + 8/y

Quadnomials Algebraic expression consisting of four terms: Addition and/or Subtraction

Variables & Constants	Constants & Variables
s – 2 + z – 7	8 – e + 4 - g

Polynomials Algebraic expressions consisting of many terms: Addition and/or Subtraction

Monomials	Binomials	Trinomials	Quadnomials	etc…

Algebra Expression   Constants, Variables, Products, Quotients without Equal Sign

5 + 3x – 2 + x	4b – 7 + 2b – 3	a + 3 – c + b

Algebra Formula   Symbolic Statement of a Relationship with an Equal Sign

D = RT	A = ½ BH	I = PRT	P = 2L + 2W

Algebra Equation   Statement of Equality (=) among Algebraic Terms

2x – 5 = 11	9 – e/2 = 4	8 + 3w = 17	7 + 5a = 12

Algebra Inequality   Statement of Inequality (< > , ≤ ≥) among Algebraic Terms

9 – 3m < 5	8 – s/2 > 6	4 + w ≤ 7	2d + 1 ≥ 5

Problem Solving   Abstract Words changed to Concrete (Visual) Images

A 12ft Bd. has 2 parts. One is twice the other!

$$\underset{\text{--------}|\text{----------------}}{\overset{x \qquad\quad x + x}{}} = 12ft$$

Thomas E. Love   Educational Consultant   Copyright@2006