# CLASS 8 MATHEMATICS HANDOUT 01

 TOPIC : ALGERAIC EXPRESSIONS AND THEIR TERMS , COEFFICIENTS , LIKE AND UNLIKE TERMS , ADDITION AND SUBTRACTION OF ALGEBRAIC EXPRESSION

Algebraic expression : Combination of constant and variables by using operations of addition , subtraction , multiplication and division is called algebraic expression.

Terms of algebraic expressions

Algebraic expressions have parts which are formed separately and then added known as term.

Example : 10a+b , 10a and b are two terms of algebraic expression.

Coefficients : A term can be written as product of factors , one of these factors may be numerical factor and other algebraic.

Example : The term 4xy has numerical coefficient 4.

Like and unlike terms:

In algebraic expressions the terms having same algebraic factors are called like terms. For example in expression 4x+3y+2x+9Y , 4x and 2x are like terms similarly 3y and 9y are also like terms.

Similarly in algebraic expression terms having different algebraic factor , they are called unlike terms. For example in expression 3xy+yz+xy+3yz , 3xy and yz are unlike terms similarly xy and 3yz are unlike terms.

Adding and subtraction of algebraic expressions

The sum of two or more than two like terms is a like term with a numerical coefficient equal to the sum of the numerical coefficients of all the like term.

Example : Adding 2x, 4x,5y we get 2x+4x+5y= 6x+5y.

Similarly, the difference between two or more than two like terms is a like term with a numerical coefficients of the two like terms.

Example : Subtract 8x from 20x we get 20x – 8x=12x.