

Algebra

- ① Algebra - Algebra is a branch of mathematics which involves constants, variables and four basic operations.
- ② Constant: - A symbol which has a fixed numerical value is called a constant.
for example - 4, 2, 1, 7, 20 - - -
- ③ Variable - A symbol which does not have a fixed value and takes various numerical values is called a variable.
for example - a, b, c, or x, y, z etc are used as variables.
- ④ variables are also called literal members or literals. Before these symbols represent a number. Now we can say these symbol itself a number. Ex - x is a number.
- ⑤ A variable allows us to express a relation in any practical situation and express many common rules and properties of geometry.
- ⑥ Algebraic Expression: - An algebraic expression is a combination of constant and variables connected by the four basic operations as symbols (+, -, ÷ and ×)
for example - $3x + 5$

① Equation: - When an algebraic expression expressed with the sign of equality (=) is called an equation. It has two sides as LHS and RHS between them is the equal sign.

Example - $2x + 5 = 1$

so $2x + 5$ is LHS
and 1 is RHS

② Solution: - When LHS of an equation is equal to its RHS only for a definite value of the variable in the equation, we can say the definite value is the solution of the equation.

③ Trial and error method: - It is a method of solution of an equation. Here we give some value to the variable and check whether it satisfies the equation. This process will continue until we find the right value which satisfies the equation.