

## Mathematical Tools.

Quantity:- Anything upon which mathematical operations like addition, subtraction, multiplication and division can be performed is called a quantity.  
e.g. integers (1, 2, 3 ---), fractions ( $\frac{1}{2}, \frac{3}{4}$ ), area, volume, velocity, force etc.

Types of Quantity:-> There are two types of quantities

(i) constant quantities (ii) variable quantities

(i) constant quantities:- A quantity whose value remains same (fixed) throughout a set of mathematical operations is k/a constant quantity.

(ii) variable quantities:- A quantity whose value does not remain same (fixed) throughout a set of mathematical operations is k/a variable quantity.

A variable is usually represented by  $x, y, z$ .

e.g. let us consider the equation

$$y = x + 2 \quad \text{--- (1)}$$

Here  $x$  and  $y$  may have different values and are called as variables. Variables are further classified into two types.

(a) Independent variables (b) dependent variables