

STD VI Maths
Fundamental Concepts Of Algebra

Assignment (ii)

Instructions to the students : The notes provided must be copied to the math's copy & then do the Home Work in the same copy.

- Algebra is generalized arithmetic
- Letters used to represent numbers are called literals
- If X is any literal & n is a natural number, then
 $X^n = \underbrace{X \times X \times X \times \dots}_{\text{taken } n \text{ times}}$,
Where x is called the **base** , n is called the **exponent or index** & X^n is called the **exponential form**
- A combination of constant & variables using the signs +, -, \times & \div is called an algebraic expression

Solved Examples

Ex. 1 write each of the following in mathematical form using signs & symbols;

- i) 5 times X is increased by 3 gives 8
$$= 5X + 3 = 8$$
- ii) 12 decreased by x equals 7
$$12 - X = 7$$
- iii) X exceeds y by 25
$$X - y = 25$$

Ex. 2 Raju's fathers age is 2 years more than 3 times Raju's age. If Raju's present age is y years. What is his fathers age

Solu. Raju's age = y years

His fathers age = 3 \times Raju's age + 2

= 3 \times y + 2

= (3 y + 2) years

Ex. 3 The length of the rectangular hall is 5 metres less than 3 times the breadth of the hall. What is its length, if the breadth is b metres

Solu. Breadth of the hall = b metres

As the length of the hall is 5 metres less than 3 times the breadth of the hall

Its length = (3 \times b - 5) metres = (3b - 5) metres

Home Work

Ex. (9.2) Question No. 2 , 3 & 4

(9.3) Question No. 2 , 4 , 6 , 9 , 11 & 14