

VII - Mathematics Assignment No-01 - Simple Equations.

Q1. Write the following statements in the form of an equation

(i) Five times a number is 45.

(ii) 5 subtracted from two times a number gives 15.

(iii) Thrice a number when added to 15 gives 45.

(iv) A number when divided by 5 gives 15

(v) The sum of number x and thrice the number y is 20.

Q2. By trial and error method, find the solution of the following equations

(i) $x - 3 = 8$

(ii) $2x + 5 = 15$

(iii) $x + 3 = 5$

(iv) $\frac{1}{2}x + 3 = 14$

(v) $x - 4 = 2x - 5$

Q3. Write a Statement for the following equations

(i) $2x - 5 = 10$

(ii) $x + 5 = 10$

(iii) $2x + 3 = 7$

(iv) $\frac{x}{2} + 7 = 17$

(v) $\frac{1}{4}x = 2$

Q4. Verify whether $x=8$ is a solution of the equation $2x-7=9$ or not?

Q5. Verify by substitution that

(i) the root of $3x-5=7$ is $x=4$

(ii) the root of $8-7y=1$ is $y=1$

Q6. If 5 is subtracted from three times a number, the result is 16. Form a simple equation

Q7. The sum of a number and its reciprocal is $\frac{13}{6}$, Form a simple equation

Q8. Form an equation of the following statement

"Sum of two consecutive natural numbers is 3"

Q9. Nisha's father is 3 times as old as his son Arun. After 15 years he will be twice the age of his son. Form an equation.

Q10 The length of a rectangle is three times its breadth. If the perimeter of the rectangle is 80 m. Form a simple equation.

ANSWERS:

(Q1) (i) $5x = 45$ (ii) $2x - 5 = 15$ (iii) $3x + 15 = 45$ (iv) $x \div 5 = 15$ (v) $x + 3y = 20$	(Q3) (i) Five subtracted from twice a no. is 10 (ii) Five added to a no. gives 10 (iii) Three added to twice a no. is 7 (iv) Seven added to half a no. gives 17 (v) one fourth of a no. is 2.	(Q4) Yes (Q5) (i) yes (ii) yes (Q6) $3x - 5 = 16$ (Q7) $x + \frac{1}{x} = \frac{13}{6}$ (Q8) $x(x+1) = 3$	(Q9) $3x + 15 = 2(x + 15)$ (Q10) $2(x + 3x) = 80$
(Q2) (i) $x = 11$ (ii) $x = 5$ (iii) $x = 2$ (iv) $x = 22$ (v) $x = 1$			