

Date:- 18.7.2017

HOME ASSIGNMENT

CLASS- VII

Chapter-4 Simple Equations

Q1 which of the following no's satisfy the given equations? [Be sure to try each no]

(i) $\frac{x+1}{3} = 7$; 16, 21, 20, -20 [Ans \rightarrow 20]

(ii) $-6+z = -8$; 2, -2, 4, 0 [Ans -2]

(iii) $x - \frac{2}{7} = \frac{5}{7}$; 0, 1, -3, 7 [Ans 1]

Q2 Solve the following:-

(i) $3(x-1) + 6 = 12$

[Ans $x=3$]

(ii) $\frac{3-y}{4} = 9$

[$y = -33$]

(iii) $\frac{2t+3}{7} = 4$

[$t = \frac{25}{2} = 12.5$]

(iv) $\frac{2x}{3} + 3 = 11$

[$x = 12$]

(v) $30 = 6(8+y)$

[$y = -3$]

(vi) $-p = 2 + p$

[$p = -1$]

Q3 Determine by substitution if:-

(i) -3 is the root of $2(x+4) = 14$ (no)

(ii) 3 " " " " $\left(\frac{x+1}{2}\right) + \left(\frac{x-1}{2}\right) = 3$ (yes)

(iii) 5 " " " " $(x-3)(x-2) = 6$ (yes)

(iv) 2 " " " " $2y + 3 = 7$ (yes)

Q4 Solve the following equations by trial & error method

(i) $2p - 4 = 6$

(ii) $\frac{x}{2} + 6 = 9$ (iii) $2m - 7 = 1$

(iv) $3x + 2 = 14$

(v) $5m + 2 = 12$ [Ans (i) $p = 5$
(ii) $x = 6$ (iii) $m = 4$

[(iv) $x = 4$ (v) $m = 2$]

Q6 One fourth of a no. decreased by 7 gives 5.
Find the no. [Ans 48]

Q7 The highest marks obtained by a student in the class is thrice the lowest marks plus 9. The highest score is 84. What is the lowest score? [Ans 25]

Q8 Think of a no. Take away 6 from $\frac{1}{2}$ of the no. The result is 22. Find the no.? [Ans 8]

Q9 Ruchi and Sindhu went shopping. Sindhu had twice the amount of money as Ruchi. Ruchi shopped for utilities worth ₹ 60 and Sindhu spent ₹ 210. Now both of them have the same amount of money left. How much money did each one have at the beginning? [Ans ₹ 150, ₹ 300]

Q10 Express in words

(i) $6m - 10 = 2$ (ii) $\frac{48}{p} = 4$ (iii) $17 = 4x + 5$

Q11 Frame equations for the following:-

(i) A no. is multiplied by 3 and 7 is taken away from the product to get the answer 17

(ii) 6 times a no. added to 10 is 58

(iii) A book costs twice that of a pen. The pen and the book together cost ₹ 48.

Q12 Give the steps you will use to separate the variables & then solve the equations

(i) $-y + 36 = 32$

[$y = 4$]

(ii) $5x + \frac{13}{2} = 19$

[Ans $x = \frac{5}{2}$]

(iii) $3x - 16 = 8$

[$x = 8$]