Maths

Class – VII

Exercise 4.1

1. Complete the last column of the table.

S. No.	Equation	Value	Say, whether the Equation is Satisfied. (Yes/ No)
(i)	$x + 3 = 0$	$x = 3$	
(ii)	$x + 3 = 0$	$x = 0$	
(iii)	$x + 3 = 0$	$x = -3$	
(iv)	$x - 7 = 1$	$x = 7$	
(v)	$x - 7 = 1$	$x = 8$	
(vi)	$5x = 25$	$x = 0$	
(vii)	$5x = 25$	$x = 5$	
(viii)	$5x = 25$	$x = -5$	
(ix)	$\frac{m}{3} = 2$	$m = -6$	
(x)	$\frac{m}{3} = 2$	$m = 0$	
(xi)	$\frac{m}{3} = 2$	$m = 6$	

2. Check whether the value given in the brackets is a solution to the given equation or not:
   (a) $n + 5 = 19$ $(n = 1)$ (b) $7n + 5 = 19$ $(n = -2)$ (c) $7n + 5 = 19$ $(n = 2)$
   (d) $4p - 3 = 13$ $(p = 1)$ (e) $4p - 3 = 13$ $(p = -4)$ (f) $4p - 3 = 13$ $(p = 0)$
3. Solve the following equations by trial and error method:
   (i) $5p + 2 = 17$ (ii) $3m - 14 = 4$
4. Write equations for the following statements:
   (i) The sum of numbers x and 4 is 9. (ii) 2 subtracted from y is 8.
   (iii) Ten times a is 70. (iv) The number b divided by 5 gives 6.
   (v) Three-fourth of t is 15. (vi) Seven times m plus 7 gets you 77.
   (vii) One-fourth of a number x minus 4 gives 4.
   (viii) If you take away 6 from 6 times y, you get 60.
   (ix) If you add 3 to one-third of z, you get 30.
5. Write the following equations in statement forms:
   (i) $p + 4 = 15$ (ii) $m - 7 = 3$ (iii) $2m = 7$ (iv) $\frac{m}{5} = 3$
   (v) $\frac{3m}{5} = 6$ (vi) $3p + 4 = 25$ (vii) $4p - 2 = 18$ (viii) $\frac{p}{2} + 2 = 8$