ACADEMIC YEAR 2022-23
Grade: X
Subject: MATHEMATICS
CH – 3- LINEAR EQUATION IN TWO VARIABLES - ASSIGNMENT -1

1   The pair of equations $y = 0$ and $y = -7$ has
   (a) one solution (b) two solution   (c) infinitely many solutions (d) no solution   1.

2 . Solve the following linear equations by elimination method

   $2x - y = 2$, $x + 3y = 15$.

3. For what value of k, $2x + 3y = 4$ and $(k+2)x + 6y = 3k + 2$ will have infinitely   many solutions

4. For what value of p, $4x + py + 8 = 0$, $2x + 2y + 2 = 0$ will have unique solution

5. 8 men and 12 boys can finish a piece of work in 5 days while 6 men and 8 boys finish it in 7

   days. Find the time taken by 1 man alone and by 1 boy alone to finish the work

6. The length of a room exceeds its breadth by 3 metres. If the length is increased by 3 metres

   and the breadth is decreased by 2 metres, the area remains the same. Find the length and the

   breadth of the room.

7 If the sum of the digits of a two digit number is 9. Also, nine times this number is twice the

   number then obtained by reversing the order of the. digits. Find the number.

8. If twice the son's age in years is added to the mother's age, the sum is 70 years. But if twice

   the mother's age is added to the son's age, the sum is 95 years. Find the age of the mother and

   her son

9. A train covered a certain distance at a uniform speed. If the train would have been 10 km/h

   faster, it would have taken 2 hours less than the scheduled time. And, if the train were slower by

   10 km/h; it would have taken 3 hours more than the scheduled time. Find the distance covered

   by the train

10. The sum of thrice the first and the second is 142 and four times the first exceeds the second by

   138, find the numbers