CLASS X
MATHEMATICS

Pair of linear equations in two variables

Time . 1 hr **M.M. 35**

Answer the following questions:

(Carrying one mark each)

1. Define the consistent and system.
2. Give an example of inconsistent system of linear pair.
3. Give any two solution of $3x - 2y = 4$.
4. Draw the graph for the equation $2x + 3y = 12$.
5. $2x + 3y = 7$, $6x + 5y = 11$ write the condition for solubility.
6. $2x + 7y = 6$ if $x = 5$ find the value of y.

(Carrying three marks each)

7. Two rails are represented by the equations $x + 2y - 4 = 0$ and $2x + 4y - 12 = 0$. Represent this situation geometrically.
8. On comparing the ratios a_1/a_2, b_1/b_2 and c_1/c^2, find out whether the following pair of linear equations are consistent or inconsistent
   (i) $9x + 3y + 12 = 0$, $18x + 6y + 24 = 0$
   (ii) $6x - 3y + 10 = 0$, $2x - y + 9 = 0$
9. Half the perimeter of rectangle of a rectangular garden, whose length is 4m more than the width, is 36 m. find the dimensions and the area of it.

(Carrying four marks each)

10. A fraction becomes 9/11 when 2 is added both the numerator and denominator. If 3 is added both numerator and denominator is become 5/6. Find the fraction by solving this situation by substitution method.
11. Meena went to the bank to withdraw Rs 2000. She asked the cashier to give her Rs 50 and Rs 100 notes only. Meena gets 25 notes in all. find how many notes of Rs 50 and Rs 100 she received . Solve by elimination method.
12. The area of rectangle gets reduced 9 square units, if its length is reduced by 5 units and breadth is increased by 3 units. If we increase the length increase by 3 units and the breadth 2 units the area increases by 67 units. Find the dimensions of the rectangle. solve by cross multiplication method.
13. The sum of two digit number and number obtain by reversing the digits are 66. If the digit differ by 2. Find the number.

14. A boat goes 30 km up stream and 44 km downstream in 10 hrs. In 13 hrs it can go 40 km up stream and 55 km downstream. Determine the speed of stream and that of the boat in the still water.

By: Sanjeeev