**Aarambh Classes**

**Class X**

**MATHS TEST**

**LINEAR EQUATIONS IN TWO VARIABLES**

**Time : 1 hour M.Marks : 25**

1. A fraction becomes ,if 2 is added to both the numerator and the denominator .If 3 ,is added to both the numerator and the denomiantor ,it becomes .Find the fraction .
2. Five years ago,Nuri was thrice as old as Sonu .Ten years later ,Nuri will be twice as old as Sonu .How old are Nuri and Sonu ?
3. The sum of the digits of atwo digit number is 9 .Also ,nine times this number is twice the number obtained by reversing the order of the digits .Find the number .
4. For which value of a and b does the following pair of linear equations have infinite number of solutions ?

2x+3y=7

(a-b)x +(a+b) y =3a+b-2

1. For which value of k will the following pair of linear equations have no solution ?

3x+y=1

(2k-1)x +(k-1)y =2k+1

6. Half the perimeter of a rectangle garden ,whose length is 4 m more than its width ,is 36 m .Find the dimensions of the garden .

7. Draw the graphs of the equation x-y+1 =0 and 3x+2y-12 =0 .Determine the coordinates of the vertices of the triangular region .

8. The taxi charges in a city consist of a fixed charge together with the charge for the distance covered .For a distance of 10 km ,the charge paid is Rs 105 and for a journey of 15 km,the charge paid is rs 155 .What are the fixed charges and the charge per km ?How much does a person have to pay for travelling a distance of 25 km ?