



**S.N. Public High School  
Indrapuri, Tajpur Road, Ludhiana  
Academic Session: 2024-25**

**Assignment-I**

**Class: - 10<sup>th</sup>**

**Subject: - Mathematics**

**Note: Writing should be Neat and Clean.**

**Solve the following given Questions:-**

1. On comparing ratio  $a_1 / a_2, b_1/b_3$  and  $c_1/c_2$ , find out whether the following pair of linear are consistent or inconsistent.

$$3/2 x + 5/3 y = 7 \quad \text{and} \quad 9x - 10y = 14$$

2. Solve the following pair of linear equations by the substitution method.

$$0.2 x + 0.3 y = 1.3 \quad \text{and} \quad 0.4x + 0.5y = 2.3$$

3. Solve the following pair of linear equations by elimination method.

$$3x - 5 y - 4 = 0 \quad \text{and} \quad 9x = 2y + 7$$

4. 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 ?

5. A fraction becomes  $9/11$ , if 2 is added to both the numerator and the denominator. If 3 is added to both the numerator and the denominator, it becomes  $5/6$  . Find the fraction ?

6. Determine if the points  $(1,5)$   $(2,3)$  and  $(-2, -1)$  are collinear.

7. Find the point on the x- axis which is equidistant from  $(2,-5)$  and  $(-2,9)$

8. Find the co-ordinates of the points of trisection of the line segment joining  $(4,-1)$  and  $(-2 -3)$  .

9. Find the ratio in which the line segment joining the points  $(-3,10)$  and  $(6,-8)$  is divided by  $(-1,6)$ .

10. Find the co-ordinates of the points which divides the line segment joining  $A(-2,2)$  and  $B(2,8)$  into four equal parts.