INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS

Subject : Mathematics Worksheet No: 5	Topic : Linear Equations in Two Variables	Date of Worksheet : 6-6-2017
Resource Person: Mrs. Anu Likson		Date : _____
Name of the Student :_____	Class &Division : IX	Roll Number : __

	Section A (Basic Skill)	**Marks**
	<u>Simplify</u>	
1.	$12 - (-18)$	1
2.	$(-21) + (17)$	1
3.	$[12 \times (-25) + 14]$	1
4.	$117 \div [2 + (-1)]$	1
5.	$(-72) \div [(-36) \div (-2)]$	1
	<u>Section B</u> Answer the following questions:	
1.	A lending library has a fixed charge for the first three days and an additional charge for each day thereafter. Aarushi paid Rs.27 for a book kept for seven days. If fixed charges are Rs.x and per day charges are Rs.y . Write the linear equation representing the above information.	1
2.	The cost of petrol in a city is Rs.40 per litre. Write an equation with x as number of litres and y total cost.	1
3.	If the point (-1, -5) lies on the graph of $3x = ay + 7$, then find the value of 'a'.	2
4.	Determine the point on the graph of the linear equation $x + y = 6$, whose ordinate is 2 times its abscissa.	2
5.	Find k in each case , if x = 2, y=1 is a solution of the equations: (i) $3x + 2y = k$ (ii) $2x - ky = 6$	3
6.	Find three different solutions for the equation $3x + 2y = 1$	3
7.	Draw the graph of linear equations $x + y = 10$ and $2x - y = 5$ and find the point of intersection.	3

8.	Draw the graph of linear equation $2x + y = 8$ on Cartesian plane. Write the coordinates of the points where this line intersects x- axis and y-axis.	3
9.	Draw the graph of $2x + y = 6$ and $2x - y + 2 = 0$. Shade the region bounded by these lines and x-axis. Find the area of the shaded region.	3
	Section C	
1.	Solve the equation $3x + 4 = 5x + 8$ and represent the solution on (i) the number line (ii) the Cartesian plane.	3
2.	Draw the graph of the equation $3x + 2y = 5$. From the graph find the value of x, when y= 4.	3
3.	If " the cost of 5 tables exceed the cost of eight chairs by Rs.150". Write the linear equation in two variables to represent the statement. Also find the cost of one table if cost of one chair is Rs.240	4
4.	Draw the lines x= 4, y=2 and x=y, on the same graph paper and then identify what type of figure obtained? Also write the point of vertices of this figure formed.	4