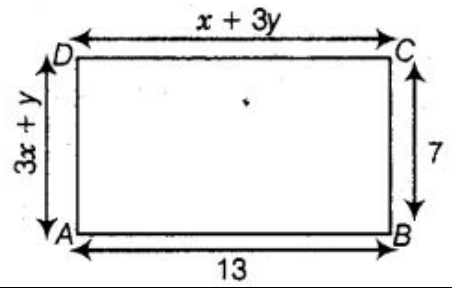
INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS

Subject : MATHEMATICS	Topic : Pair of linear equations in two variables	Date of Worksheet : 29-4-2019
Resource Person:Mrs.Anu Likson		
Name of the Student: _____	Class &Division:_____	Roll Number : ___

Sl.No.	Section A-[Basic skills]	
1 .	Solve for x : $-4(x + 2) = 3(x – 1)$	
2.	Solve for x : $5(x - 4) = -5$	
3.	$5\frac{1}{2} \div \frac{77}{4} =$	
4.	3214 x 435	
5.	456 ÷ 7	
	Section B - [Chapter based questions]	
1.	For what values of k the following system of equations has no solution? i)$kx – 5y = 2$ ii)$(3k +1)x + 3y - 2 = 0$ $6x + 2y = 7$ $(k^2 + 1) x + (k – 2)y – 5 = 0$	1
2.	For what values of k the following system of equations will be inconsistent? i)$4x + 6y = 11$ ii)$kx + 3y + (2-k) = 0$ $2x + ky = 7$ $12x + ky = k$	1
3.	Find the value of c for which the system $cx + 2y = 5$,$3x + y = 1$ has i)a unique solution and ii)no solution	2
4.	Find the values of a and b for which the following systems of equations has infinitely many solutions. i)$(2a – 1)x – 3y = 5$ ii)$3x + 4y = 12$ $3x + (b-2)y = 3$ $(a + b)x + 2(a – b)y = 5a - 1$	3
5.	Solve graphically i) $2x + 3y = 8$ $x – 2y + 3 = 0$	4
6.	Solve for x and y : i)$ax + by – a + b = 0$ ii) $mx – ny = m^2 + n^2$ $bx – ay – a – b = 0$ $x+y = 2m$.	4
7.	Solve for x and y : $99x + 101y = 499$ $101x + 99y = 501$	4

8.	Ten years hence, a man's age will be twice the age of his son. Ten years ago, the man was four times as old as his son.Find their present ages.	4
9.	The length of a room exceeds its breadth by 3 meters.If the length is increased by 3 meters and breadth is decreased by 2 meters, the area remains the same. Find the length and breadth of the room.	4
10.	A person can row a boat at the rate of 5km/hr in still water.He takes thrice as much time in going 40km upstream as in going 40km downstream. Find the speed of the stream.	4
11.	The sum of the numerator and denominator of a fraction is 3 less than twice the denominator. If the numerator and denominator are decreased by 1 , the numerator becomes half the denominator. Determine the fraction.	4
12.	Find the values of x and y in the following rectangle:  	4
13.	The boat goes 25km upstream and 33km downstream in 8 hours. It can also go 40km upstream and 77km downstream in 15 hours. Find the speed of the stream and that of boat in still water.	4

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