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| 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 : \_\_\_ |

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| 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. | = | |
| 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 (k2 + 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 = m2 + n2  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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