Pair of Linear Equations in two Variables : Worksheet -8

1. If the system of equations $4x + 6y = 11$ and $2x + ky = 7$ forms on in consistent system then k^2 [ ]

   a) 1 b) 4 c) 9 d) 16

2. If $x + 2y + 7 = 0$; $2x + ky + 14 = 0$ represent a pair of coincident lines, then k= [ ]

   a) 1 b) 2 c) 3 d) 4

3. If the lines given by the system of equation $3x + 2y = 12$ and $5x – 2y = 4$ meet y – axis at a point, then coordinates of the points are[ ]

   a) (0, 6) (0, 2) b) (0, -6) (0, -2) c) (0, 6) (0, -2) d) (0, -6) (0, 2)

4. If $x \neq 0$; $y \neq 0$, and $\frac{2}{x} + \frac{3}{y} = \frac{9}{xy}$, $\frac{4}{x} + \frac{9}{y} = \frac{21}{xy}$, then x & y are[ ]

   a) (1, 3) b) (1, - 3) c) (3, 1) d) (-3, -1)

5. $\frac{15}{u} + \frac{2}{v} = 17$ and $\frac{1}{u} + \frac{1}{v} = \frac{36}{5}$, then $\frac{u}{v}$= [ ]

   a) $\frac{5}{7}$ b) $\frac{7}{5}$ c) 35 d) – 35

6. The value of 'α' for which the system will be inconsistent where the system of equations given by $\alpha x + 3y = \alpha - 3$ and $12x + \alpha y = \alpha$ [ ]

   a) ±1 b) ± 2 c) 6 d) 4

7. A man has 20rupee notes and 6 rupees notes only in his purse if has all together 40 notes all totalling 500/-, then the notes of each kind he has are respectively 20 rupees and 5 rupees [ ]

   a) 20, 30 b) 20, 20 c) 10, 20 d) 20, 10

8. A lending library has a fixed charge for the first three days and an additional charge for each day thereafter Saritha paid 27/- for a book kept for seven days, while susy paid 21/- for thebook she kept for five days. Then the fixed charge is [ ]

a) 5 b) 10 c) 15 s d) 20

9. The area of the triangle formed by the lines whose equations are given by the system of equations 4x – 3y + 4 = 0 and 4x + 3y -20 = 0 and X – axis is [ ]

a) 10Sq.units b) 12Sq.units c) 15Sq.units d) 16Sq.units

10. If x + y and x – y both are different from zero and $\frac{xy}{x+y} = \frac{6}{5}$; $\frac{xy}{y-x} = 6$, then x + y = [ ]

a) 2 b) 3 c) 4 d) 5