SHRI DHARMASTHALA MANJUNATHESHWARA SCHOOL, GRADE 9 WORKSHEET 4 LINEAR EQUATIONS IN TWO VARIABLES

- 1. Write the following statements as a linear equations in two variables.
 - i) A lending library has a fixed charge for the first three days and an additional charge for each day thereafter, Roshni paid ₹35 for a book kept for seven days.
 - ii) The cost of a ball pen is ₹5 less than half of the cost of a fountain pen.
 - iii) The cost of a hen is 50 times the cost of its egg.
 - iv) From the bus stand in Delhi, if we buy 2 tickets to Agra and 3 tickets to Mathura, the total cost is ₹440.
 - v) The parking charges of a car in a parking lot is ₹50 for the first two hours and ₹20 per hour for subsequent hours.
- 2. Find any four solutions for the following equations.

i)
$$4x + 3y = 12$$

ii)
$$2x + 5y = 9$$

iii)
$$2x + y = 7$$

iv)
$$x = 2y$$

- 3. Check whether x = 3 and y = 1 is a solution of 8x + 5y = 29.
- 4. Find a solution for the linear equation 4x + 0y + 10 = 0.
- 5. If $x = k^2$ and y = k is a solution of the equation x 5y + 6 = 0, then find the value of k.
- 6. If (5, k) is solution of the linear equation 2x + y 6 = 0, then find the value of k.
- 7. If $\pi x + 3y = 25$ and y = 1, then find the value of x. $\left(take \ \pi = \frac{22}{7}\right)$
- 8. Find the value of 'a' in each of the following, if x = 1 and y = 1

i)
$$x - y = a$$

ii)
$$3x + ay = 6$$