# SUB- MATHEMATICS, CLASS-IX CHAPTER -LINEAR EQUATION IN TWO VARIABLES WORKSHEET(ADVANCE) 

TIME-45MINS
MAXIMUM MARKS-20

## CHOOSE THE CORRECT OPTION.(MCQ $(2 \times 1=2)$

1. The positive solutions of the equation $a x+b y+c=0$ always lie in the
(A) 1st quadrant
(B) 2nd quadrant
(C) 3rd quadrant
(D) 4th quadrant
2.The point of the form $(a,-a)$ always lies on the line
(A) $x=a$
(B) $y=-a$
(C) $y=x$
(D) $x+y=0$

## FILL IN THE BLANKS $(2 \times 1=2)$

3.The graph of the linear equation $y=x$ passes through
4. The points $(1,3),(2,3)$ and $(4,3)$ are ----------- .

ANSWER THE FOLLOWING. $(2 \times 1=2)$
5. Find the point of intersection of the line represented by the equation $5 x+7 y=10$ with the $x$-axis.
6. Every point on the graph of a linear equation in two variables does not represent a solution of the linearequation. State whether the above statement is true or false with reason.

## SHORT ANSWER TYPE QUESTIONS-I : $(2 \times 2=4)$

7. Determine the point on the graph of the linear equation $2 x+5 y=19$, whose ordinate is $1 \frac{1}{2}$ times its abscissa.
8. If the point $(2 k-3, k+2)$ lies on the graph of the equation $2 x+3 y+15=0$, find the value of $k$. SHORT ANSWER TYPE QUESTIONS-II : $(2 \times 3=6)$
9. Find the solution of the linear equation $x+2 y=8$ which represents a point on
(i) the $x$-axis
(ii) the $y$-axis .
(iii) the line parallel to $x$-axis and at a distance of 3 units above it.
10. In the linear equation $y=4 x+13$, if $x$ is the number of hours a labourer is on work and $y$ are his wages in rupees then draw the graph. Also find the wages when work is done for 6 hours

## LONG ANSWER TYPE QUESTIONS : $(1 \times 4=4)$

11. Draw the graph of the equation $x=4$ and $=5$. Find the distance between the point of intersection of the graphs and the origin. Also find the area formed by the graphs and the coordinate axes.
