Maths

Class IX

10 copies.

Worksheet - I Linear equation in two Variables

1 Draw the graph of equation $3x+y=6$ Also find the points when the line intersect x-axis and y-axis

2, Two years later a father will be eight years more than three times the age of the son. Taking the present age of father and son as x and y resp:

a, Write a linear equ: for the above and draw its graph.

b, From the graph find the age of father when son's age is 10 yrs.

3, Represent the solutions of equation $2x+1 = -x-3$

a) on number line

b) in cartesian plane.

4, Solve the L.E for 'x'

$$\frac{2x-3}{5} + \frac{x+3}{4} = \frac{2x+3}{4}$$

5, Ramesh is driving his car with a uniform speed of 90 km/hr. Draw the time distance graph on the graph paper. find the distance travelled by him in i) $\frac{1}{2}$ hr ii) 2 hrs.

6). If (2, 3) and (4, 0) lie on the graph of equation $ax+by=1$. find value of a and b. Plot the graph of equation obtained.

7 The taxi fare in a city as follows. For the first 2 km the fare is Rs 100, and for the subsequent distance the fare is Rs 40/km. Draw the graph of the given information

8 Equation of line. parallel to x-axis and 2 units above the origin

($x=2$, $x=-2$, $y=2$, $y=-2$)

Hints

1) Plot the graph.
x-axis (2,0) y-axis (0,6)

2, $x+2 = 3(y+2)+8$
$x-3y=12$
son 10 yrs father 42.

3 $x=4$

4 $x=4$ (Take L.C.M & Simp)

5 $x \rightarrow$ Time, $y \rightarrow$ distance.
$y=90x$, P($\frac{1}{2}$, 45) Q(2, 180)
from graph.

6 $a=\frac{1}{4}$, $b=\frac{1}{6}$, $\frac{1}{4}x+\frac{1}{6}y=1$
$3x+2y=12$.

7, $y = 100+(x-2)40$
$y = 40x+20$.

8 $y=+2$