

- The  $x$ -coordinate of a point is its distance from  $y$ -axis.
- The  $y$ -coordinate of a point is its distance from  $x$ -axis.
- The coordinates of the origin are  $(0, 0)$ .
- The  $x$ -coordinate of every point on  $y$ -axis is zero.
- The  $y$ -coordinate of every point on  $x$ -axis is zero.
- A bar graph is used to show comparison among categories.
- A pie graph is used to compare parts of a whole.
- A histogram is a bar graph that shows data in intervals.
- A line graph displays data that changes continuously over periods of time.
- A line graph which is a whole unbroken line is called a linear graph.
- Fixing a point on the graph sheet we need,  $x$ -coordinate and  $y$ -coordinate.
- The relation between dependent variable and independent variable is shown through a graph.

**Ex.** The following tables gives the quantity of petrol and its cost.

No. of litres of Petrol	10	15	20	25
Cost of petrol in ₹	500	750	1000	1250

Plot a graph to show the data.

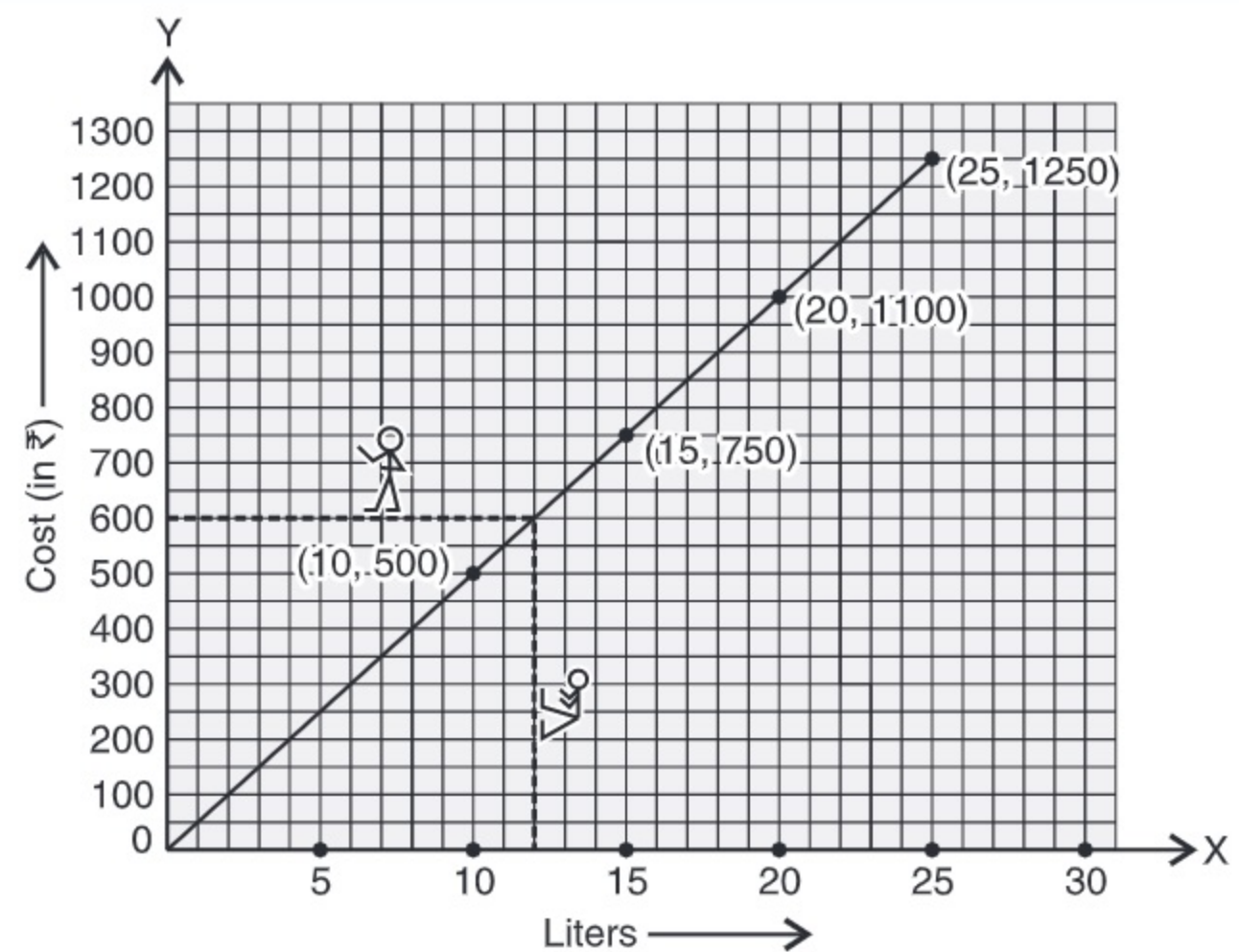
**Sol.** **Step I :** Let us take a suitable scale on both the axis.

**Step II :** Mark number of litres along the horizontal axis.

**Step III :** Mark cost of petrol along the verticals axis

**Step IV :** Plot the points :  $(10, 500)$ ,  $(15, 750)$ ,  $(20, 1000)$ ,  $(25, 1250)$ .

**Step V :** Join the points.



We find that the graph is a line. (It is a linear graph.)