

Class – 9th

Chapter-4

Subject Maths

Worksheet-14

Linear Equation in two variable

- The taxi fare in a city is as follows: For the first kilometer, the fare is `8 and for the subsequent distance it is `5 per km. Taking the distance covered as x km and total fare as Rs y , write a linear equation for this information, and draw its graph.
- If the work done by a body on application of a constant force is directly proportional to the distance travelled by the body, express this in the form of an equation in two variables and draw the graph of the same by taking the constant force as 5 units. Also read from the graph the work done when the distance travelled by the body is
(i) 2 units (ii) 0 unit
- Yamini and Fatima, two students of Class IX of a school, together contributed `100 towards the Prime Minister's Relief Fund to help the earthquake victims. Write a linear equation which satisfies this data. (You may take their contributions as `x and `y.) Draw the graph of the same.
- In countries like USA and Canada, temperature is measured in Fahrenheit, whereas in countries like India, it is measured in Celsius. Here is a linear equation that converts Fahrenheit to Celsius:

$$F = \left(\frac{9}{5}\right)C + 32$$

- Draw the graph of the linear equation above using Celsius for x-axis and Fahrenheit for y-axis.
- If the temperature is 30°C, what is the temperature in Fahrenheit?
- If the temperature is 95°F, what is the temperature in Celsius?