

# Class IX Maths Assignment Topic: Linear equations in two variable

---

1. Determine the point on the graph of the linear equation  $x + y = 6$ , whose ordinate is twice its abscissa.
- Q2. How many solution(s) of the equation  $3x + 2 = 2x - 3$  are there on the  
i) Number Line      ii) Cartesian plane
- Q3. Draw the graph of the equation represented by the straight line which is parallel to the x-axis and 3 units above it.
- Q4. Find the solutions of the linear equation  $x + 2y = 8$ , which represents a point on i) x axis ii) y-axis
- Q5. For what values of  $c$ , the linear equation  $2x + cy = 8$  has equal values of  $x$  and  $y$  as its solution.
- Q6. Give the geometrical interpretations of  $5x + 3 = 3x - 7$  as an equation  
i) in one variable ii) In two variables
- Q7. Draw the graph of the equation  $3x + 4y = 6$ . At what points, the graph cut the x-axis and the y-axis.
- Q8. At what point does the graph of equation  $2x + 3y = 9$  meet a line which is parallel to y-axis at a distance 4 units from the origin and on the right side of the y-axis.
- Q9. Express the following linear equations in the form  $ax + by + c = 0$  and indicate the values of  $a$ ,  $b$  and  $c$  in each case: (i)  $-2x + 3y = 6$  (ii)  $x = 3y$  (iii)  $2x = -5y$
- Q10. Find the value of  $k$  if  $x = 2$ ,  $y = 1$  is a solution of the equation  $2x + 3y = k$ .
- Q11. If the point  $(3, 4)$  lies on the graph of the equation  $3y = ax + 7$ , find the value of  $a$ ?
- Q12. (i) Draw the graph of the linear equation using given Celsius for x-axis and Fahrenheit for y-axis.

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

- (ii) If the temperature is  $30^\circ\text{C}$ , what is the temperature in Fahrenheit?
- (iii) If the temperature is  $95^\circ\text{F}$ , what is the temperature in Celsius?
- (iv) If the temperature is  $0^\circ\text{C}$ , what is the temperature in Fahrenheit and if the temperature is  $0^\circ\text{F}$ , what is the temperature in Celsius?
- (v) Is there a temperature which is numerically the same in both Fahrenheit and Celsius? If yes, find it.