

Important Questions CBSE Class 9th : Mathematics Year 2009 (Unsolved)
(Mathematics-2)

Q. 1. Solve the equation $2x + 1 = x - 2$ & represent the solution on:-

- 1. The number line**
- 2. Cartesian plane**

Q. 2. The linear equation that converts the Fahrenheit to Celsius is as follows :-

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

1. Draw the graph of the linear equation.

2. If the temperature is 950F , what is the temperature in Celsius.

3. Is there a temperature which is numerically the same in both Fahrenheit and Celsius ? If yes, find it.

Q. 3. Express the following information in the form of linear equation:-

1. In a one day International cricket match between India & Srilanka played in Nagpur, two Indian batsman together scored 176 runs.

2. The cost of a notebook is twice the cost of a pen.

Q. 4. Find two solutions for each of the following equations:-

1. $4x + 3y = 12$

2. $2x + 5y = 0$

3. $px + y = 3$

Q. 5. Express each of the following linear equation in the standard form & hence find the values of a, b & c in each case:-

1. $x - \frac{y}{5} - 10 = 0$

2. $2x + 3y = (c) 2x = -5y$

Q. 6. Check which of the following are solutions of the equation $x - 2y = 4$.

1. $(\sqrt{2}, 4\sqrt{2})$

2. $(1,1)$

3. $(4,0)$

Q. 7. (a). How many solutions does the following linear equation & why?

$3x - y + 5 = 0$

Find the value of k, if $x = 2, y = 1$ is a solution of the equation $2x + 3y = k$.

Q. 8. (a). Given the point $(1,2)$, find the equation of a line on which it lies. How many such equations are there ?

Give an equation of two lines passing through $(2,14)$. How many more Such lines are there & why?

Q. 9. Draw the graph of each of the following linear equation in two variables:-

1. $3 = 2x + y$

2. $y = 3x$

Q. 10. The taxi fare in the city is as follows : For the first kilometer, the fare is Rs. 8 & for the subsequent distance it is Rs. 5 per km. Write a linear equation for this information & draw its graph?