

# THE INDIAN SCHOOL, KINGDOM OF BAHRAIN

## CLASS - IX ASSIGNMENT IN LINEAR EQUATIONS IN TWO VARIABLES

- Express  $y$  in terms of  $x$  in the equation  $3x + 2y - 14 = 0$  and check whether the point  $(5, 2)$  is a solution on the line represented by the equation.
- Express  $x$  in terms of  $y$  in the equation  $2x - 3y - 18 = 0$ . Find the points where the line represented by the line cuts the  $x$ -axis and  $y$ -axis.
- Draw the graphs of the lines represented by the equations  $3x - 4y = 1$  and  $4x - 3y = 6$  in the same graph. Also, find the coordinates of the point where the two lines intersect.
- Draw the graph of the following equations: i)  $-6x + 5y - 2 = 0$  ii)  $y = 0$  iii)  $3x - 4y = 0$  iv)  $4x - 10 = 0$
- Draw the graph of the equation  $y - 3 = 2x$ . From the graph find the value of  $y$  when  $x = 5$
- Draw the graph of  $y = x$  and  $x = -y$  in the same graph. Also, find the coordinates of the point where the two lines intersect.
- Solve: i)  $\frac{3x-5}{7x-5} = \frac{1}{9}$  ii)  $8x + 7 = 35$
- If the point  $(3, 4)$  lies on the graph of the equation  $3y - ax = 7$ , find the value of  $a$ .
- The cost of 3 pens is Rs 7 more than twice the cost of 5 pencils. Write the statement as a linear equation in two variables.
- Give the geometrical representation of the equation  $2y + 11 = 0$  as an equation i) in one variable ii) in two variables
- The equation of  $x$ -axis is -----
- Any point on the  $y$ -axis is of the form.....
- The linear equation  $5x - 7y - 7 = 0$  has.....solution (s).
- The geometrical representation of a linear equation is .....
- Write four different solutions of  $5x - 3y = 10$
- Give equation of two lines on same plane which are intersecting at point  $(3, 2)$ .
- After 7 years the age of mother will be three times the age of daughter. Write a linear equation in two variables to represent this statement.
- A part of monthly expenses of a family on milk is fixed which is Rs. 700 and remaining varies with quantity of milk taken extra at the rate of Rs. 25 per litre. Taking quantity of milk required extra as  $x$  litre and total expenditure on milk as Rs.  $y$ . Write a linear equation representing the above information.
- Solve for  $x$ :  $\frac{3x-7}{5} - \frac{x+1}{6} = \frac{2x+2}{12} - 1$
- Solve:  $2(x-1)(x+4) + 9 = (2x+3)(x-2)$
- Find at least five solutions for the equation  $2(x-3) - 3(y+1) = 0$