

ASSIGNMENT - 3

Class – 9th
Max Marks:20

Subject : MATHS
Time : 1 Hour

CHAPTER – 4
LINEAR EQUATIONS IN TWO VARIABLES

Q.1 If $P(x, y)$ and $P'(y, x)$ are same points then which of the following is true?

- a. $x + y = 0$ b. $xy = 0$ c. $x - y = 0$ d. $\frac{x}{y} = 0$

Q.2 Age of a father is 7 years more than 3 times the present age of his son. The above statement can be expressed in a linear equation as:-

- a. $x - 3y - 7 = 0$ b. $x + 3y + 7 = 0$
c. $x + 3y - 7 = 0$ d. $x - 3y + 7 = 0$

Q.3 The number of solutions, the equation $3x + 5y + 15 = 0$ can have

- a. one only b. exactly two c. Zero d. Infinite

Q.4 If $(a, 1)$ lies on the graph of $3x - 2y + 4 = 0$, then $a = ?$

- a. $-\frac{2}{3}$ b. $\frac{2}{3}$ c. $\frac{3}{2}$ d. $-\frac{3}{2}$

Q.5 The geometric representation of $x = -2$ meets the x – axis at

- a. $(2, 0)$ b. $(-2, 0)$ c. $(0, 2)$ d. $(0, -2)$

Q.6 Abscissa of all points on the y -axis is:-

- a. 0 b. 1 c. -1 d. none of these

Q.7 An ordered pair that satisfy an equation in two variables is called its

- a. zero b. root c. Solution d. Both 'a' and 'b'

Q.8 Richa had 10 chocolates, let her brother borrowed y chocolates from her and then Richa had 4 chocolates. Which equation models this solution?

- a. $10 - y = 4$ b. $10 + y = 4$
c. $10y = 4$ d. $4y = 10$

Q. 9 Which of the following is a solution of the equation $2x + 3y = 6$?

- a. (1,2) b. (1,1) c. (-3, 4) d. (3, 1)

Q.10 $ax + by + c = 0$ does not represent equation of line , if

- a. $a = c = 0, b \neq 0$ b. $c = 0, a \neq 0, b \neq 0$
c. $b = c = 0, a \neq 0$ d. $a = b = 0$

Q.11 Find the value of m, if $(-m, 3)$ is a solution of equation $4x + 9y - 3 = 0$.

- a. 6 b. -6 c. 4 d. -4

Q.12 The graph of the line $x = 3$ passes through the point.

- a. (0, 3) b. (2, 3) c. (3, 2) d. none of these.

Q.13 Graph of $x = 2$ and $y = -1$ intersect at

- a. (-1, 2) b. (2,-1) c. (1, 2) d. (2, 1)

Q.14 Which of the following equation has graph parallel to y axis?

- a. $y = -2$ b. $x = 1$ c. $x - y = 2$ d. $x + y = 2$

Q.15 Find the coordinates of the point, where the graph of $3x + y = 9$ cuts the x -axis

- a. (3, 0) b. (0, 2) c. (2, 0) d. (0, -3)

Q.16 If (2, 1) and (1, 0) lie on the graph of $\frac{x}{a} + \frac{y}{b} = 1$ then the values of a and b are

- a. $a = 1, b = -1$ b. $a = -1, b = 1$
c. $a = 2, b = 1$ d. $a = 1, b = 2$

Q.17 If $2a - 3 = 5$ and $3b + 1 = 2$ then $3b - 2a$ is

- a. 7 b. -9 c. -3 d. -7

Q.18 Find the value of k. if (1, -1) is a solution of the equation $3x - ky = 8$ and the coordinates of another point lying on its graph.

- a. 5 ; (6, 2) b. -5; (6, 2) c. 5; (6, -2) d. 5; (-6, 2)

Q.19 The distance between the graph of the equations $x = -3$ and $x = 2$ is

- a. 5 b. 2 c. 3 d. 4

Q.20 Find the area enclosed between the lines $x + y = 0$ and $x = 2$

- a. 4 sq. units b. 8 sq. units c. 6 sq. units d. 9 sq. units

Q.21 The graph of $y = m$ is a straight line parallel to

- a. x-axis b. y- axis c. both axis d. none of these

Q.22 Any point on the line $y = 3x$ is of the form

- a. (a, 3a) b. (3a, a) c. $(a, \frac{a}{3})$ d. $(\frac{a}{3}, -a)$

Q.23 Straight line passing through the points (-1, 1) , (0, 0) and (1, -1) has equation.

- a. $y - x$ b. $x + y = 0$ c. $y = 2x$ d. $2 + 3y = 7x$

Q.24 For the equation $5x - 7y = 35$. If $y = 5$ then the value of x is

- a. -12 b. -14 c. 14 d. 12

Q.25 Which of the following ordered pairs is the solution of the equation $4x - 3y = 10$?

- a. (1, 2) b. (-1, 2) c. (1, -2) d. None of these

Q.26 If we multiply or divide both sides of a linear equation with a non zero number, then the solution of the linear equation .

- a. Changes
b. Remains the same
c. Changes in order of multiplication only
d. Changes in case of division only.

Q.27 Two point having same abscissae but different ordinates lie on

- a. x-axis b. y- axis
c. A line parallel to x- axis d. A line parallel to y- axis

Q.28 The perpendicular distance of the point P (4, 3) from x – axis is-

- a. 4 b. 3 c. 5 d. none of these.

Q.29 Write the equation of following lines.

1. Passing through (7, 0) and parallel to y- axis.
2. Passing through (0, 3) and parallel to x –axis.

Q.30 For what value of k , $x = 1$, $y = 0$ is a solution of $\left(\frac{k+2}{k-1}\right) x - \left(\frac{3k-2}{k+2}\right) y - 3 = 0$?