



ST. LAWRENCE HIGH SCHOOL



TOPIC – Simultaneous Linear Equation & Distance Formula

Subject : Mathematics

Class - 9

First term

F. M. 15

WORKSHEET NO. - 5

Solutions

Date: 30.01.2021

Q.1) Choose the correct option:

(1x15=15)

- i) If $x = 3$, $y = k$ is a solution of the equation $3x - 4y + 7 = 0$, then the value of k is
c) 4
- ii) The solution of the pair of linear equations $2x - y = 5$ and $5x - y = 11$ is
b) $x = 2, y = -1$
- iii) If $x = a, y = b$ is the solution of the equations $x - y = 2$ and $x + y = 4$, then the value of a and b are respectively
c) 3 and 1
- iv) The solution of the system of equations $\frac{4}{x} + 5y = 7$ and $\frac{3}{x} + 4y = 5$ is
a) $x = \frac{1}{3}, y = -1$
- v) A pair of linear equations which has a unique solution $x = 2, y = -3$ is
d) $x - 4y - 14 = 0$
 $5x - y - 13 = 0$
- vi) The distance between the two points $(a + b, c - d)$ and $(a - b, c + d)$ is
b) $2\sqrt{b^2 + d^2}$
- vii) If the distance between the two points $(x, -7)$ and $(3, -3)$ is 5 units, then the values of x are
a) 0 or 6
- viii) If the distance of the point $(x, 4)$ from origin is 5 units, then the values of x are
c) ± 3
- ix) The triangle formed by the points $(3, 0)$ and $(-3, 0)$ and $(0, 3)$ is
d) isosceles right angled
- x) The co-ordinates of the centre of the circle are $(0, 0)$ and the co-ordinates of the point on the circumference are $(3, 4)$, the length of the radius of the circle is
a) 5 units
- xi) The triangle produced by joining the points $(-3, 1)$, $(1, -2)$ and $(1, 4)$ is
b) isosceles
- xii) The distance between the points $(9, 0)$ and $(0, -12)$
d) 15 units
- xiii) The distance between the points $(b + a, d - c)$ and $(b - a, d + c)$ is
b) $2\sqrt{a^2 + c^2}$
- xiv) AB is a diameter of a circle. If $A(3, -3)$ and $B(x, -7)$ and $AB = 5$ units, then the values of x are
c) 0 or 6
- xv) Which of the following points is nearest to the origin
b) $(-3, 1)$

-Chaitali Roy