



ST. LAWRENCE HIGH SCHOOL



TOPIC – Simultaneous Linear Equation & Distance Formula

Subject : Mathematics

Class-9

F. M. 15

WORKSHEET NO. - 5

First term

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
 a) 16 b) - 16 c) 4 d) - 4
- ii) The solution of the pair of linear equations $2x - y = 5$ and $5x - y = 11$ is
 a) $x = -1, y = 2$ b) $x = 2, y = -1$ c) $x = 0, y = -5$ d) $x = 5/2, y = 0$
- 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
 a) 3 and 5 b) 5 and 3 c) 3 and 1 d) -1 and -3
- iii) The solution of the system of equations $\frac{4}{x} + 5y = 7$ and $\frac{3}{x} + 4y = 5$ is
 a) $x = \frac{1}{3}, y = -1$ b) $x = \frac{1}{3}, y = 1$ c) $x = 3, y = -1$ d) $x = -3, y = 1$
- v) A pair of linear equations which has a unique solution $x = 2, y = -3$ is
 a) $x + y = -11$ b) $2x + 5y = -11$ c) $2x - y = 1$ d) $x - 4y - 14 = 0$
 $2x - 3y = -5$ $4x + 10y = -22$ $3x + 2y = 0$ $5x - y - 13 = 0$
- vi) The distance between the two points $(a + b, c - d)$ and $(a - b, c + d)$ is
 a) $2\sqrt{a^2 + c^2}$ b) $2\sqrt{b^2 + d^2}$ c) $\sqrt{a^2 + c^2}$ d) $\sqrt{b^2 + d^2}$
- 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 b) 2 or 3 c) 5 or 1 d) -6 or 0
- viii) If the distance of the point $(x, 4)$ from origin is 5 units, then the values of x are
 a) ± 4 b) ± 5 c) ± 3 d) none of these
- ix) The triangle formed by the points $(3, 0)$ and $(-3, 0)$ and $(0, 3)$ is
 a) equilateral b) isosceles c) scalene 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 b) 4 units c) 3 units d) none of these
- xi) The triangle produced by joining the points $(-3, 1)$, $(1, -2)$ and $(1, 4)$ is
 a) equilateral b) isosceles c) scalene d) right angled
- xii) The distance between the points $(9, 0)$ and $(0, -12)$
 a) 10 units b) 12 units c) 11 units d) 15 units
- xiii) The distance between the points $(b + a, d - c)$ and $(b - a, d + c)$ is
 a) $\sqrt{a^2 + c^2}$ b) $2\sqrt{a^2 + c^2}$ c) $\sqrt{b^2 + d^2}$ d) $2\sqrt{b^2 + d^2}$
- 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
 a) 5 or -1 b) 2 or 3 c) 0 or 6 d) -6 or 0
- xv) Which of the following points is nearest to the origin
 a) $(2, 3)$ b) $(-3, 1)$ c) $(0, 4)$ d) $(3, 4)$

-Chaitali Roy