

ST. LAWRENCE HIGH SCHOOL A JESUIT CHRISTIAN MINORITY INSTITUTION



WORKSHEET-28 <u>SUBJECT – MATHEMATICS</u> <u>Final - Term</u>

Chapter: Co-ordinate Geometry

Topic: Miscellaneous

Choose the correct option

<u>(1 x 15=15)</u>

Date: 25.01.2021

Class: XI

- 1. The equation of the line which makes an angle of 45 degree with x-axis and cuts the y-axis at (0, 3) is
 - a) y=x+3
 - b) y=3
 - c) x=3
 - d) None of these
- 2. The magnitude of the angle which the line y = -x makes with the positive direction of x-axis is
 - a) 45 degree
 - b) 90 degree
 - c) 135 degree
 - d) 225 degree
- 3. The slope of a line parallel to y-axis is
 - a) 0
 - b) 1
 - c) -1
 - d) Undefined

4. The st. lines joining the points (3, -5) and (-3, -5) is parallel to the -

- a) Y axis
- b) X axis
- c) Line 3x + 5y = 0
- d) Line 3x = 5y

- 5. The angle between the straight lines x = 5 and y + 5 = 0 is
 - a) 0 degree
 - b) 90 degree
 - c) 180 degree
 - d) None of these.
- 6. The coordinates of two extremities of a diameter are (x, 3) and (3, 5) and

centre is at (2, y). Then x & y are -

- a. 2, 3
 b. 3, 2
 c. 1, 4
- d. 4,1
- 7. The position of the origin with respect to the circle $x^2 + y^2 3x + 2y 19 = 0$ is
 - a) Inside the circle b) Outside the circle
 - c) On the Circle d) None of these.

8. The radius of the circle $x^2 + y^2 + 4x - 8y = 5$ is -

- a. 5 unit
- b. 4 unit
- c. 3 unit
- d. 6 unit

9. The circle $(x+2)^2 + (y-2)^2 = 4$ touches –

- a. Both the axes.
- b. The x-axis
- c. The y-axis.
- d. None of these.

10. The circle $(x-4)^2 + (y-3)^2 = 9$ touches –

- a. The x-axis.
- b. The y-axis.
- c. Both the axes.
- d. None of these.

- 11. The length of the latus rectum of the parabola $3x^2 = -8y$ is ? a) $\frac{4}{3}$ unit , b) $\frac{8}{3}$ unit , c) $\frac{2}{3}$ unit , d) 5 unit
- 12. The equation of the directrix of the parabola $4x^2 = 3y$ is ? a) 16y = 3, b) 16y = -3, c) 8y = 3, d) 8y = -3
- 13. The length of the latus rectum of the parabola $(y-1)^2 = -6(x+2)$ is ? a) 7 units , b) 4 units , c) $\frac{3}{2}$ units , d) None of These
- 14. The parametric equations of the parabola $y^2 = 8x$ are ? a) $x = 6t^2$, y = 3tb) $y = 6t^2$, x = 3tc) $x = 3t^2$, y = 6td) $x = 2t^2$, y = 4t

15. The coordinates of the vertices of the ellipse $4x^2 + y^2 = 16$ are ?

a) $(0, \pm 2)$, b) $(0, \pm 3)$, c) $(\pm 4, 0)$, d) $(0, \pm 4)$

Prepared by :-

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