Coordinate Geometry : Worksheet -1

1. The point where the line $y = mx + c$ cuts the Y-axis is ( )

   A. (0 , 0) B. (0 , c) C. (c , 0) D. (m , c)

2. The figure formed by (0 , 3) , (0 , 0) , (4 , 0) is ( )

   A. a right triangle B. equilateral triangle

   C. isosceles triangle D. a line

3. Pair of $3y$ perpendicular lines: ( )

   A. $y= 3x$; $x =$ B. $y = 8$; $x = 4$

   C. $y=3x$; $x = -3y$ D. $x =8$; $y = 4$

4. The centroid of triangle whose vertices are (1,2), (2,3) and (3,4) is ( )

   A. (2 , 3) B. (6 , 9) C. (0 , - 1) D. (1 , 1)

5. Distance between (0 , 0) and ($\sin\theta$, $\cos\theta$) is ( )

   A. 0 B. 1 C. 2 D. 4

6. The midpoint of the line segment joining (1,2) and (3,4) is ( )

   A. (2 , 3) B. (3 , 2) C. (2 , 2) D. (2 , 4)

7. If 'θ ' is the inclination of a line, its slope is ( )

   A. Sinθ B. Cos θ C. tan θ D. Cot θ

8. Distance between $(a\cos\alpha, 0)$ and $(0, a\sin\alpha)$ is: ( )

   A. 0 B. a C. $\sqrt{a}$ D. a^2

9. Distance between the origin and (h, k) is : ( )

A. $\sqrt{h+k}$ B. $\sqrt{h-k}$ C. $\sqrt{h^2+k^2}$ D. $\sqrt{h^2-k^2}$

10. Area of triangle whose vertices are (0,0),(4,0) and (0,3) is ( )

A. 12 B. 6 C. 7 D. 24