ONE MARK TEST

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ENGLISH MEDIUM **LESSON – 5** **TEST - 3**

1 The slope of the line joining $(12,3)$, $(4,a)$ is $\frac{1}{8}$. The value of 'a' is

(A) 1 (B) 4 (C) -5 (D) 2

2 The equation of a line passing through the origin and perpendicular to the line $7x - 3y + 4 = 0$ is

(A) $7x - 3y + 4 = 0$ (B) $3x - 7y + 4 = 0$ (C) $3x + 7y = 0$ (D) $7x - 3y = 0$

3 A man walks near a wall, such that the distance between him and the wall is 10 units. Consider the wall to be the Y axis. The path travelled by the man is

(A) $x = 10$ (B) $y = 10$ (C) $x = 0$ (D) $y = 0$

4 Consider four straight lines

(i) l_1; $3y = 4x + 5$ (ii) l_2; $4y = 3x - 1$ (iii) l_3; $4y + 3x = 7$ (iv) l_4; $4x + 3y = 2$

Which of the following statement is true ?

(A) l_1 and l_2 are perpendicular (B) l_1 and l_4 are parallel

(C) l_2 and l_4 are perpendicular (D) l_2 and l_3 are parallel

5 The slope of the line which is perpendicular to a line joining the points $(0,0)$ and $(-8,8)$ is

(A) -1 (B) 1 (C) $\frac{1}{3}$ (D) -8

6 $(2, 1)$ is the point of intersection of two lines.

(A) $x - y - 3 = 0$; $3x - y - 7 = 0$ (B) $x + y = 3$; $3x + y = 7$

(C) $3x + y = 3$; $x + y = 7$ (D) $x + 3y - 3 = 0$; $x - y - 7 = 0$

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7 If $(5,7)$, $(3,p)$ and $(6,6)$ are collinear, then the value of p is

(A) 3 (B) 6 (C) 9 (D) 12

8 When proving that a quadrilateral is a trapezium, it is necessary to show

(A) Two sides are parallel. (B) Two parallel and two non-parallel sides.

(C) Opposite sides are parallel. (D) All sides are of equal length.

9 If slope of the line PQ is $\frac{1}{\sqrt{3}}$ then slope of the perpendicular bisector of PQ is

(A) $\sqrt{3}$ (B) $-\sqrt{3}$ (C) $\frac{1}{\sqrt{3}}$ (D) 0

10 The point of intersection of $3x - y = 4$ and $x + y = 8$ is

(A) $(5,3)$ (B) $(2,4)$ (C) $(3,5)$ (D) $(4,4)$

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