UDAAN 2024

Coordinate Geometry

DHA-03

1. Find the coordinates of the point which divides the join of (–1, 7) and (4, –3) in the ratio 2 : 3.

(A) (1, 3) (B) (2, 6)

(C) (3, 4) (D) (4, 6)

2. The ratio, in which the *Y*-axis divides the line segment joining the points (5, –6) and (–1, –4) is:

(A) 1 : 5 (B) 5 : 1

(C) 2 : 4 (D) None of these

3. The coordinates of point *A*, where *AB* is the diameter of a circle whose centre is (3, –4) and *B* is (1, 4) is:

(A) (2, 0) (B) (12, –5)

(C) (5, –12) (D) None of the above

4. The fourth vertex *D* of a parallelogram *ABCD* whose three vertices are *A*(–2, 3), *B*(6, 7) and *C*(8, 3) is:

(A) (0, 1) (B) (0, –1)

(C) (–1, 0) (D) (1, 0)

5. If points *A*(5, *p*), *B*(1, 5), *C*(2, 1) and *D*(6, 2) form a square *ABCD*, then '*p*' =

(A) 7 (B) 3

(C) 6 (D) 8

6. If *A* and *B* are (–2, –2) and (2, –4) respectively, find the coordinates of *P* such that $AP = \frac{3}{7}AB$ and *P* lies on the line segment *AB*.

7. Find the ratio in which the line segment joining the points (–3, 10) and (6, –8) is divided by (–1, 6).

8. Determine the ratio in which the line $2x + y - 4 = 0$ divides the line segment joining the points *A*(2, –2) and *B*(3, 7).

Note: Kindly find the Video Solution of DHAs Questions in the DPPs Section.

Answer Key

1. (A)

2. (B)

3. (C)

4. (B)

5. (C)

6. $\left(\frac{-2}{7}, \frac{-20}{7}\right)$

7. (2 : 7)

8. (2 : 9)

Hints and Solutions

1. (A) (1, 3)

2. (B) (5 : 1)

3. (C) (5, –12)

4. (B) (0, –1)

5. (C) Six.

6. $\left(\frac{-2}{7}, \frac{-20}{7}\right)$

7. (2 : 7)

8. (2 : 9)

PW Web/App - https://smart.link/7wwosivoicgd4
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