

Question 1:

Write the abscissa of each of the following points:

- (i) (0, 5)
- (ii) (3, 7)
- (iii) (-2, 4)
- (iv) (6, -3)

ANSWER:

- (i) Abscissa of (0,5) = 0
- (ii) Abscissa of (3,7) = 3
- (iii) Abscissa of (-2,4) = -2
- (iv) Abscissa of (6,-3) = 6

Question 2:

Write the ordinate of each of the following points:

- (i) (4, 0)
- (ii) (5, 2)
- (iii) (1, -4)
- (iv) (-10, -7)

ANSWER:

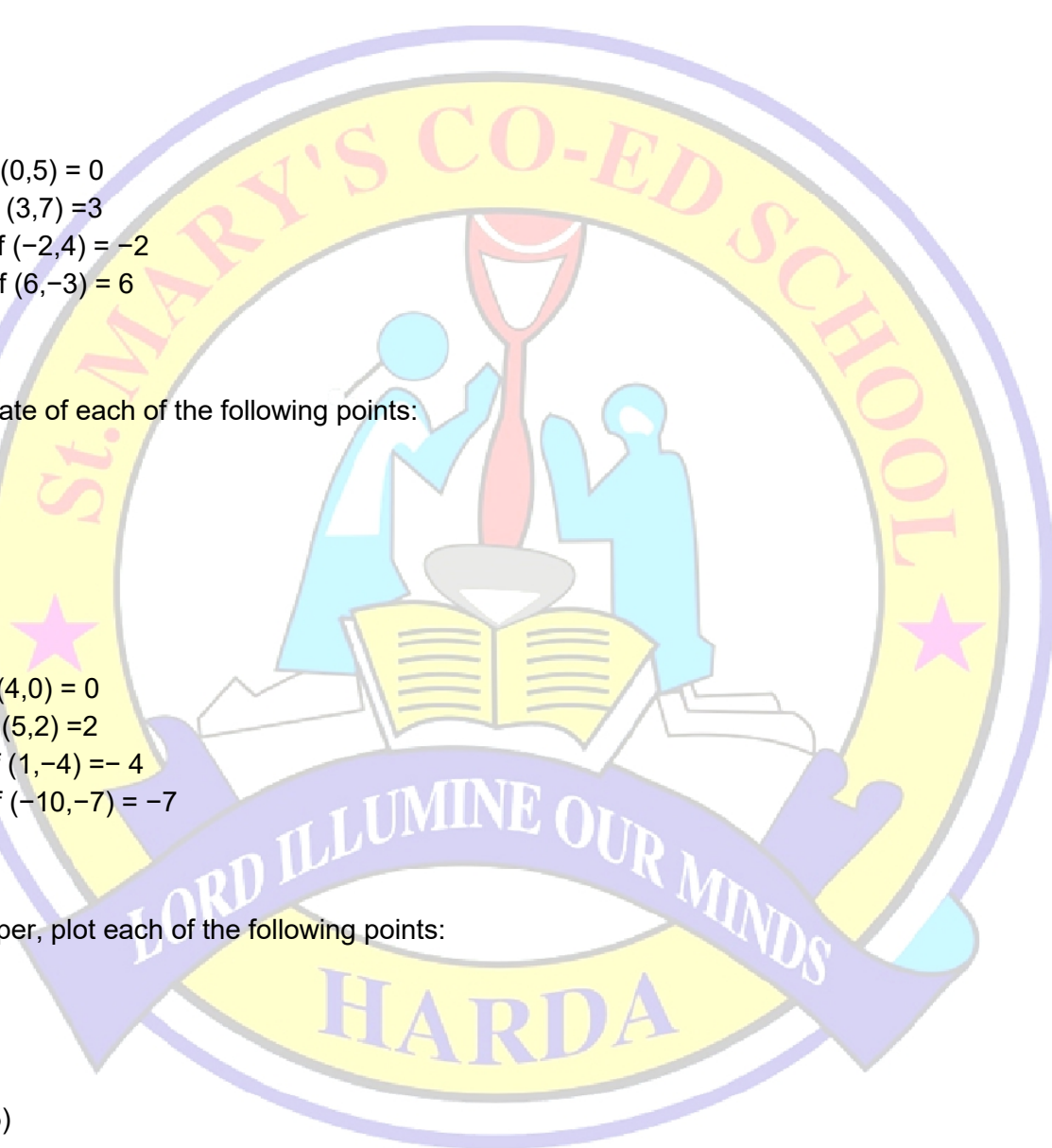
- (i) Ordinate of (4,0) = 0
- (ii) Ordinate of (5,2) = 2
- (iii) Ordinate of (1,-4) = -4
- (iv) Ordinate of (-10,-7) = -7

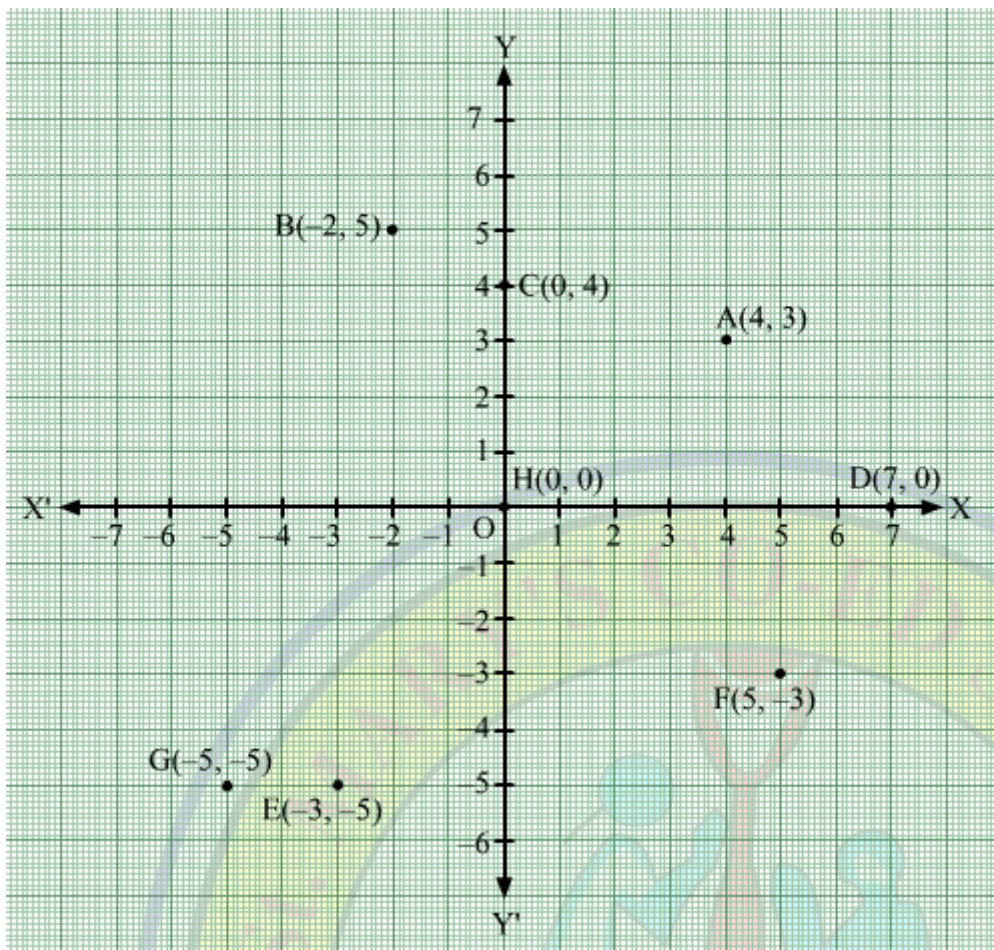
Question 3:

On a graph paper, plot each of the following points:

- (i) A (4, 3)
- (ii) B (-2, 5)
- (iii) C (0, 4)
- (iv) D (7, 0)
- (v) E (-3, -5)
- (vi) F (5, -3)
- (vii) G (-5, -5)
- (viii) H (0, 0)

ANSWER:





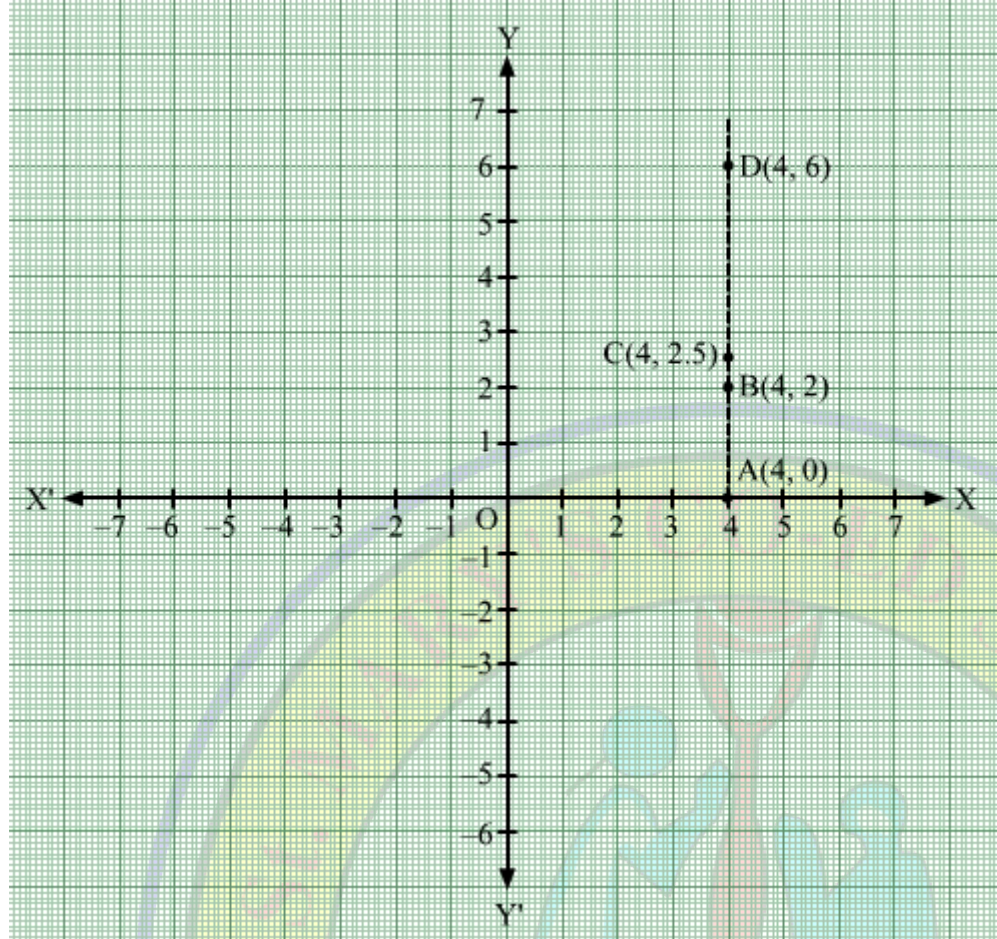
Question 4:

Plot each of the following points on a graph sheet. Verify that they lie on a line.

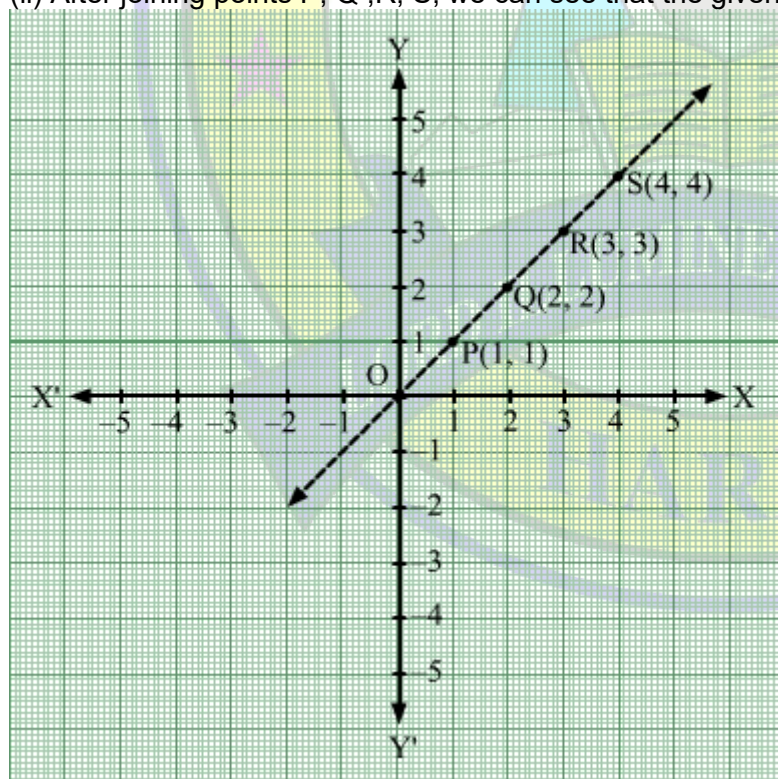
- (i) A (4, 0), B (4, 2), C (4, 2.5), and D (4, 6)
- (ii) P (1, 1), Q (2, 2), R (3, 3), and S (4, 4)
- (iii) L (6, 2), M (5, 3), N (3, 5), and O (2, 6)

ANSWER:

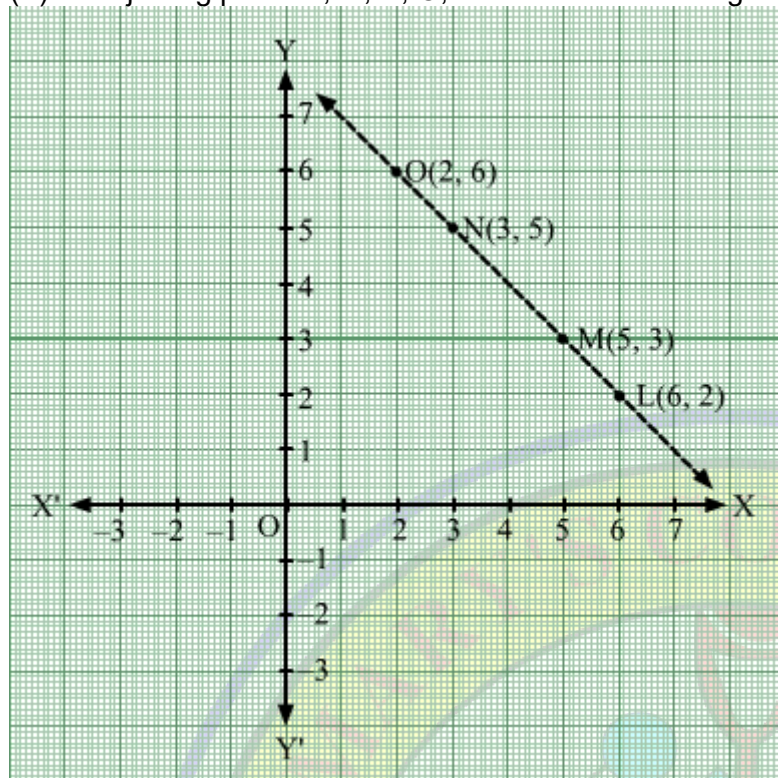
(i) After joining points A, B, C, D, we can see that the given points forms a straight line



(ii) After joining points P, Q, R, S, we can see that the given points forms a straight line



(iii) After joining points L, M, N, O, we can see that the given points forms a straight line



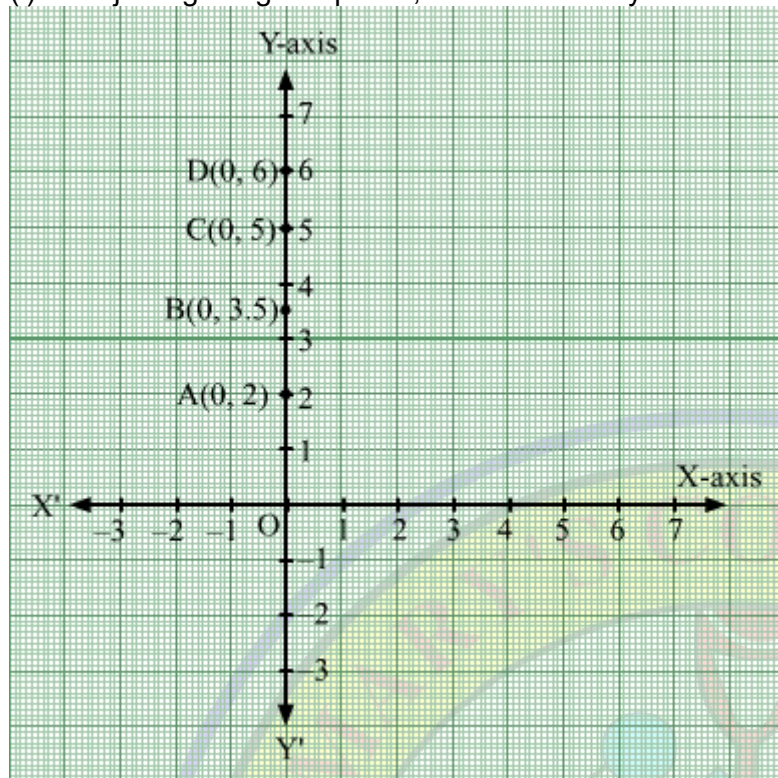
Question 5:

Plot the given points on a graph sheet and check if they lie on a straight line. If not, name the shape they form when joined in the given order.

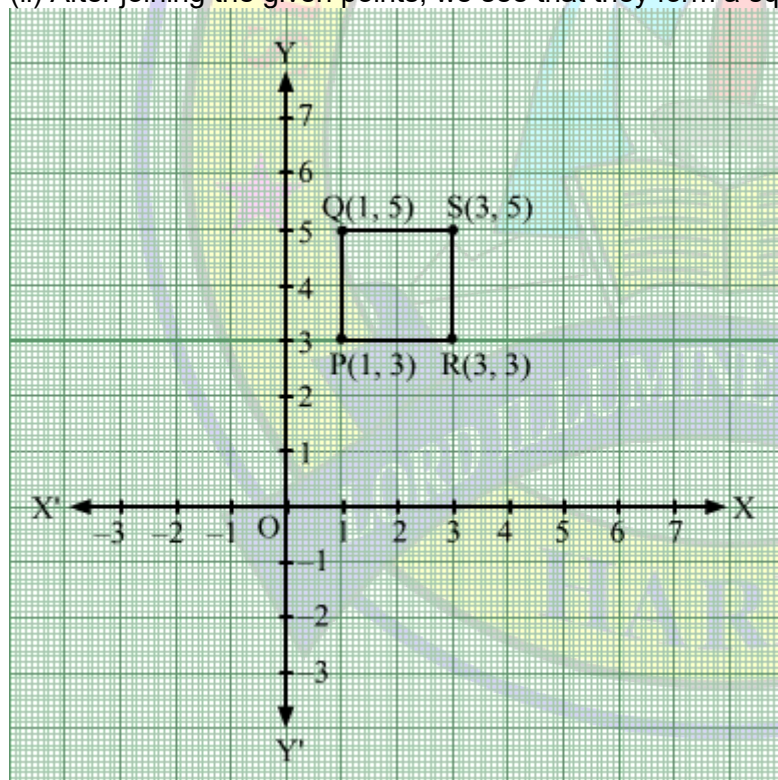
- (i) A (0, 2), B (0, 3.5), C (0, 5) and D (0, 6)
- (ii) P (1, 3), Q (1, 5), R (3, 3) and S (3, 5)
- (iii) E (4, 5), F (5, 5), G (5, 7) and H (6, 5)
- (iv) L (2, 0), M (2, 3), N (0, 3) and O (0, 0)
- (v) J (4, 3), K (6, 1), L (6, 5) and M (4, 7)

ANSWER:

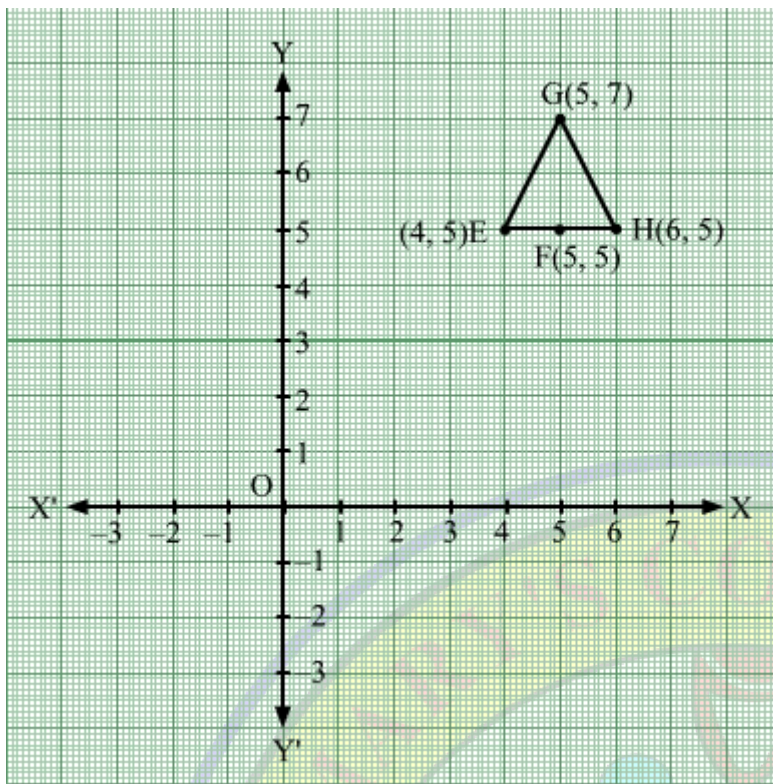
(i) After joining the given points, we see that they form a straight line.



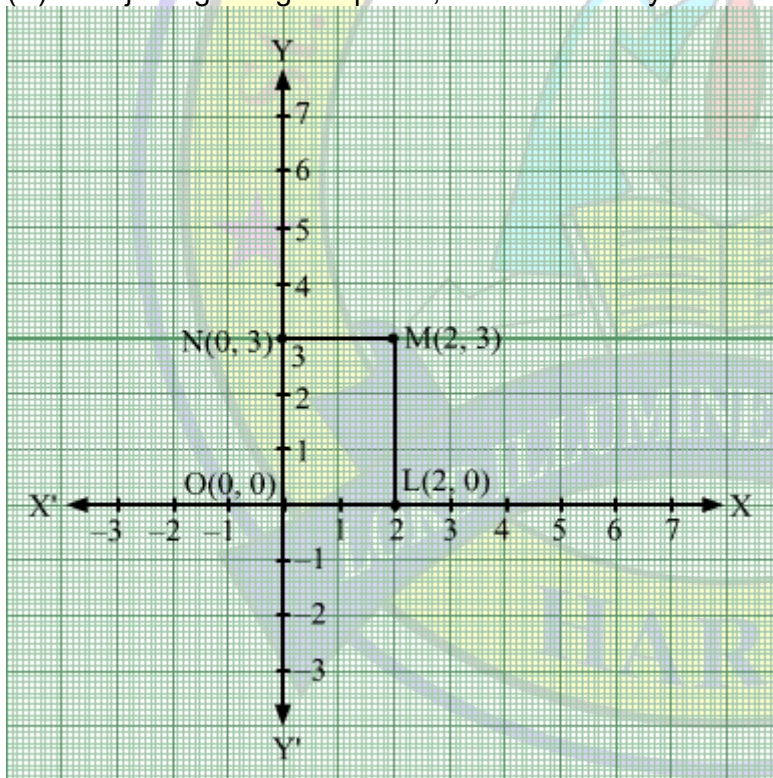
(ii) After joining the given points, we see that they form a square.



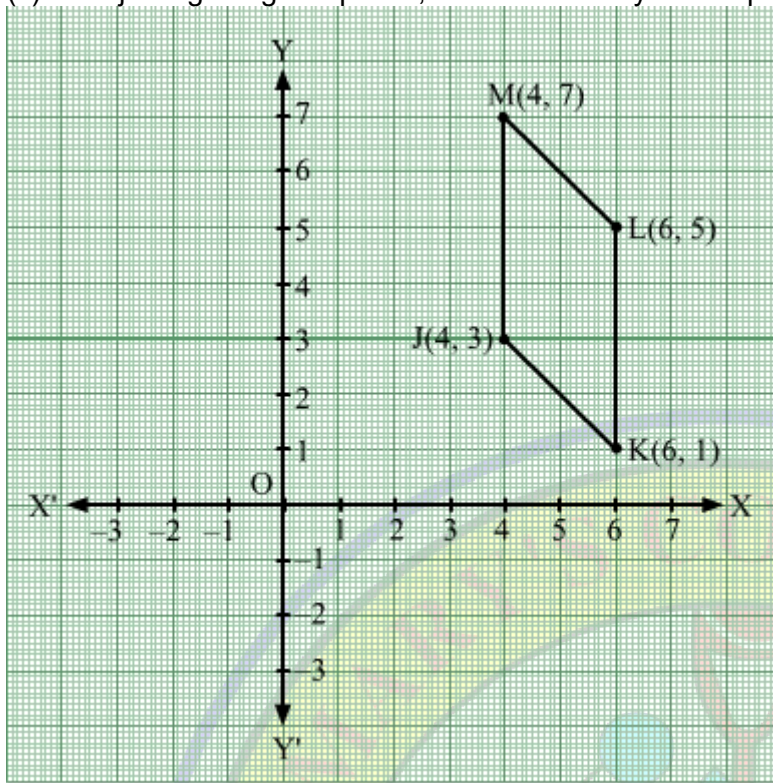
(iii) After joining the given points, we see that they form a triangle.



(iv) After joining the given points, we see that they form a rectangle.



(v) After joining the given points, we see that they form a parallelogram.

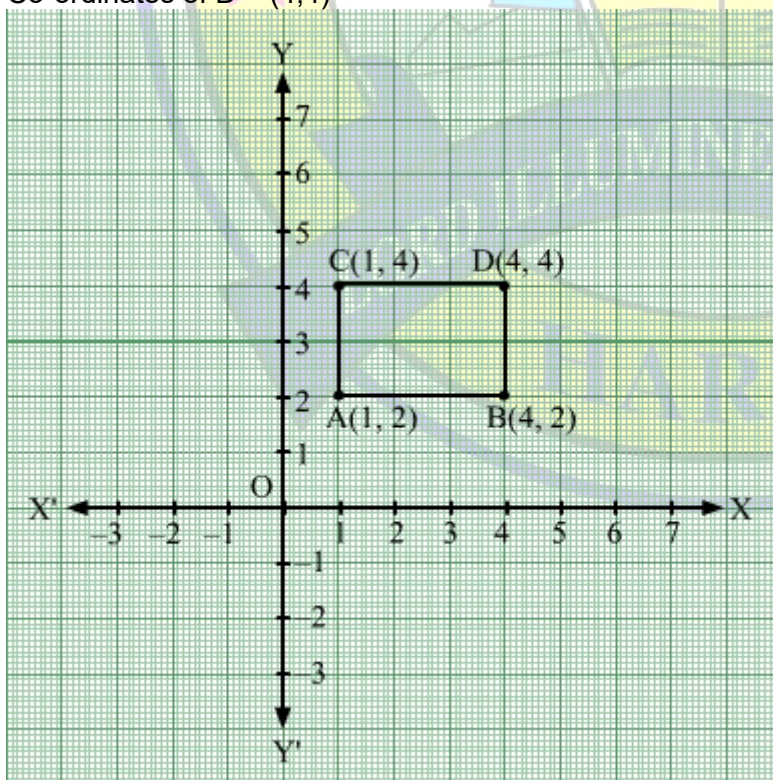


Question 6:

Locate the points A (1, 2), B (4, 2) and C (1, 4) on a graph sheet taking suitable axes. Write the coordinates of the fourth point D in order to complete the rectangle ABCD.

ANSWER:

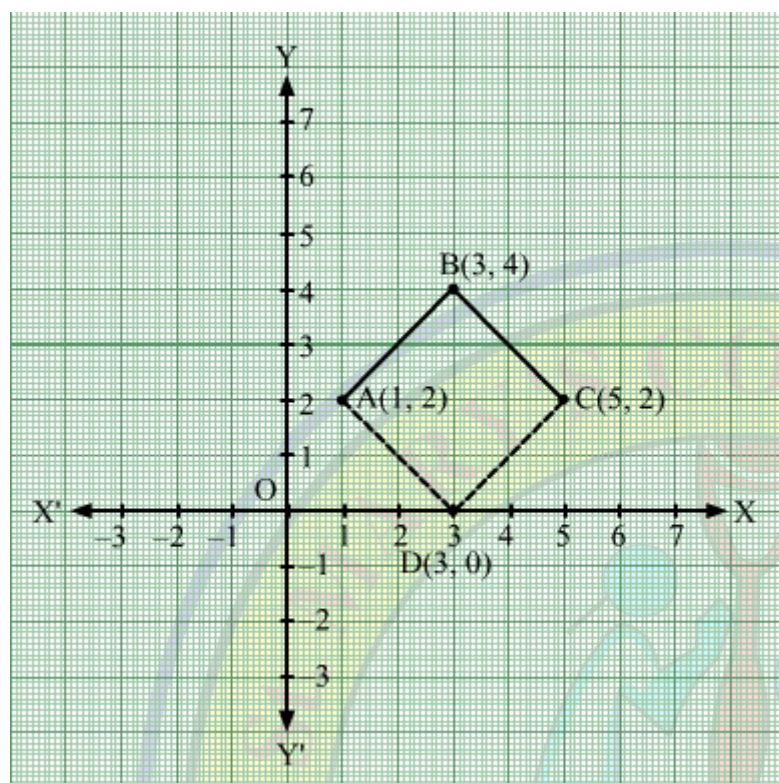
Co-ordinates of D = (4,4)



Question 7:

Locate the points A (1, 2), B (3, 4) and C (5, 2) on a graph sheet taking suitable axes. Write the coordinates of the fourth point D in order to complete the rhombus ABCD. Measure the diagonals of this rhombus and check whether they are equal or not.

ANSWER:



Co-ordinates of D = (3, 0)

Distance AC = 4 unit

distance BD = 4 unit

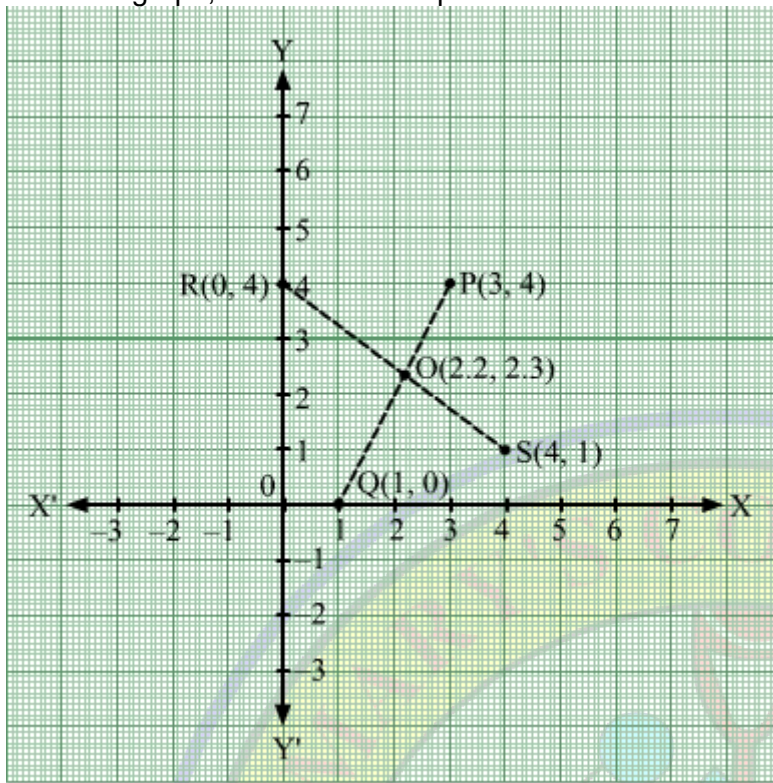
Hence, we can see that diagonals of the given rhombus are of equal length i.e, 4 units.

Question 8:

Locate the points P (3, 4), Q (1, 0), R (0, 4) and S (4, 1) on a graph sheet and write the coordinates of the points of intersection of line segments PQ and RS.

ANSWER:

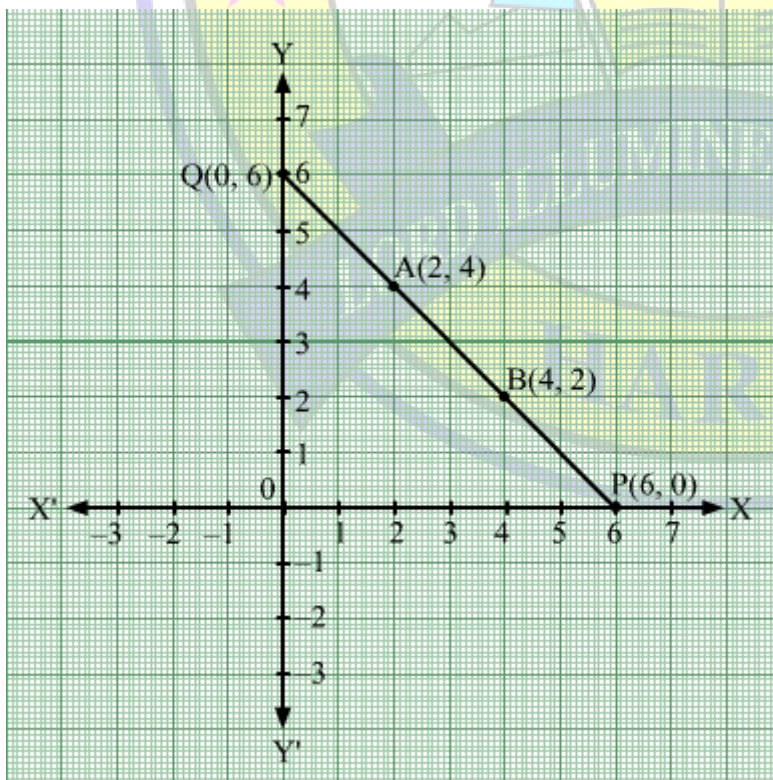
From the graph, we can see that point of intersection of line segment PQ and RS is $O(2.2, 2.3)$



Question 9:

Plot the points A (2, 4) and B (4, 2) on a graph sheet and draw a line passing through these two points. Extend the line on both sides to meet the coordinate axes. What are the coordinates of the points where this line meets the x-axis and the y-axis?

ANSWER:



From the graph, we can see that after extending line AB, it cuts x-axis at $P(6,0)$ and y-axis at $Q(0,6)$.

Question 10:

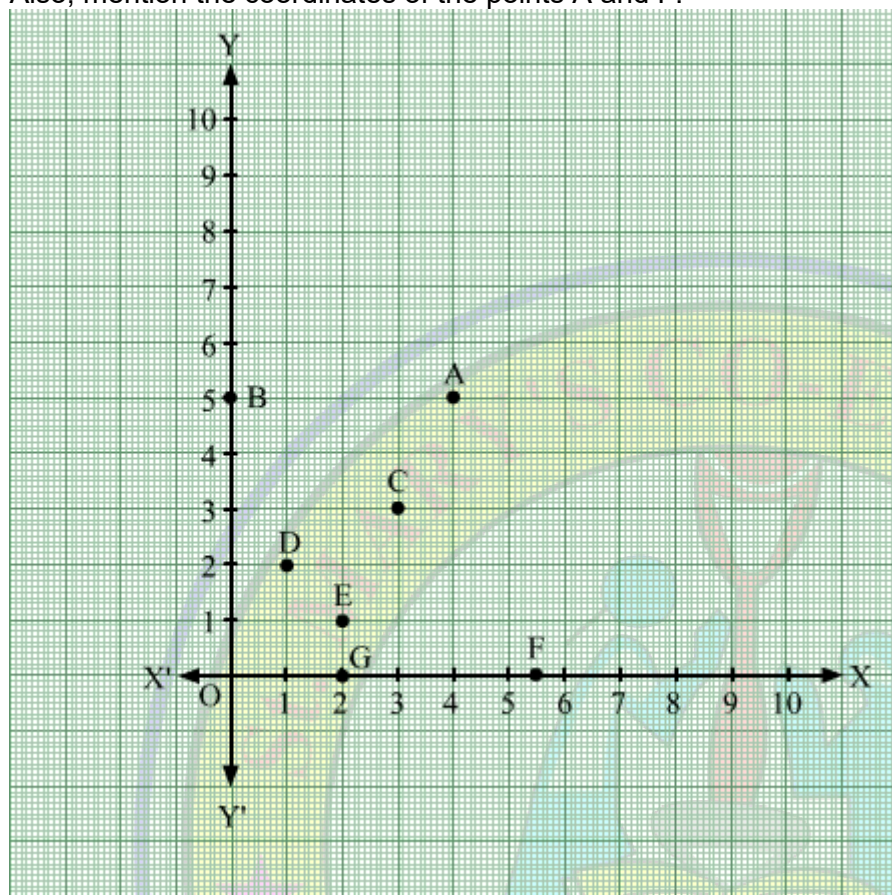
From the given figure, choose the letters that indicate the location of the following points:

(a) (2, 1)

(b) (0,5)

(c) (2,0)

Also, mention the coordinates of the points A and F.



ANSWER:

(a) Location of (2,1) is shown by E.

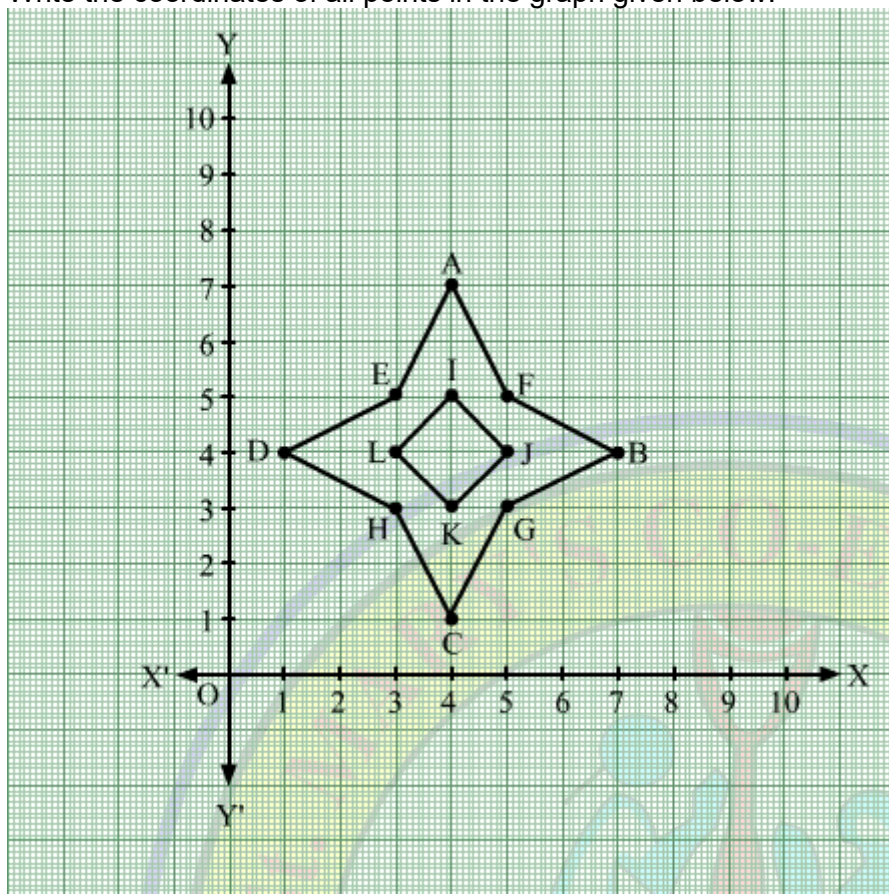
(b) Location of (0,5) is shown by B.

(c) Location of (2,0) is shown by G.

Co-ordinates of point A is (4,5) and F is (5.5,0)

Question 11:

Write the coordinates of all points in the graph given below:



ANSWER:

From the graph

Co-ordinate of A = (4,7)

Co-ordinate of B = (7,4)

Co-ordinate of C = (4,1)

Co-ordinate of D = (1,4)

Co-ordinate of E = (3,5)

Co-ordinate of F = (5,5)

Co-ordinate of G = (5,3)

Co-ordinate of H = (3,3)

Co-ordinate of I = (4,5)

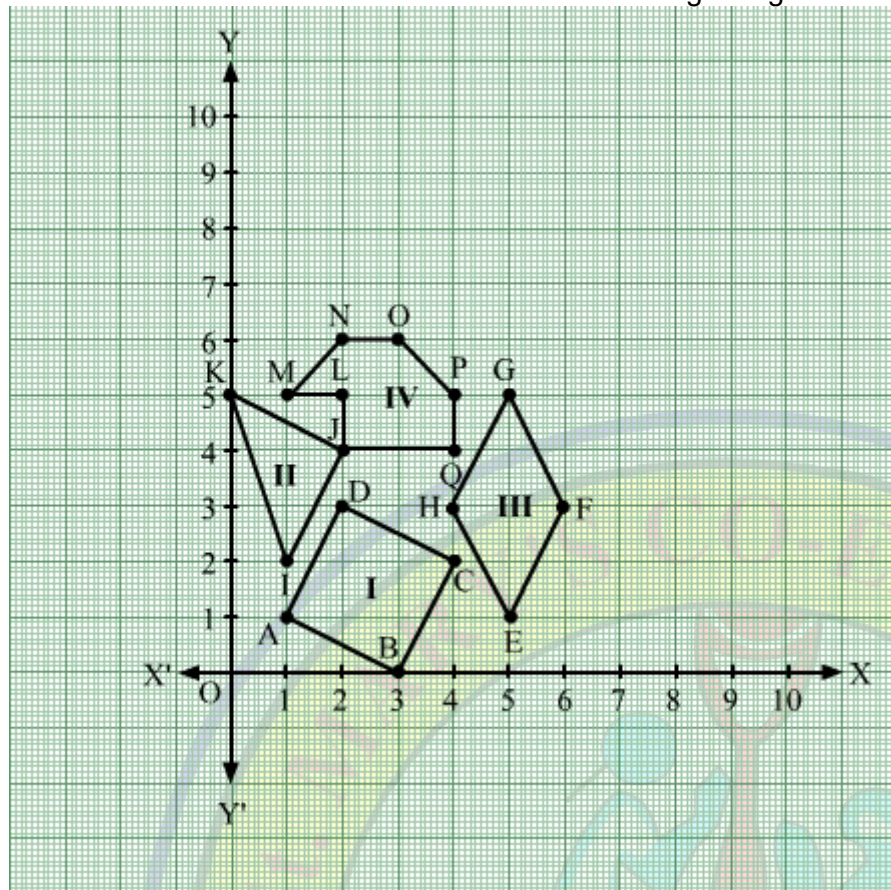
Co-ordinate of J = (5,4)

Co-ordinate of K = (4,3)

Co-ordinate of L = (3,4)

Question 12:

Write the coordinates of the vertices of each of the figures given below:



ANSWER:

From the graph

- Co-ordinate of A = (1,1)
- Co-ordinate of B = (3,0)
- Co-ordinate of C = (4,2)
- Co-ordinate of D = (2,3)
- Co-ordinate of E = (5,1)
- Co-ordinate of F = (6,3)
- Co-ordinate of G = (5,5)
- Co-ordinate of H = (4,3)
- Co-ordinate of I = (1,2)
- Co-ordinate of J = (2,4)
- Co-ordinate of K = (0,5)
- Co-ordinate of L = (2,5)
- Co-ordinate of M = (1,5)
- Co-ordinate of N = (2,6)
- Co-ordinate of O = (3,6)
- Co-ordinate of P = (4,5)
- Co-ordinate of Q = (4,4)

Question 13:

Fill in the blanks to make the given statements true.

- (i) A point in which the x-coordinate is 0 and y-coordinate is 5 will lie on
- (ii) All point with y-coordinate as 0 lie on
- (iii) The x-coordinate of any point lying on the y-axis is always
- (iv) The point where the two axes intersect is called the

- (v) For the point (5, 2), the distance from the x-axis is units.
(vi) The distance of any point from the y-axis is the coordinate.
(vii) The coordinates of the origin are

ANSWER:

- (i) Y- axis
(ii) X-axis
(iii) 0
(iv) origin
(v) 2
(vi) x
(vii) (0, 0)

Question 1:

In which of the following quadrants does the point P (3, 6) lie?

- (a) I
(b) II
(c) III
(d) IV

ANSWER:

- (a) I

Question 2:

In which of the following quadrants does the point (-7, -1) lie?

- (a) I
(b) II
(c) III
(d) IV

ANSWER:

- (C) III

Question 3:

In which of the following quadrants does the point A (2, -3) lie?

- (a) I
(b) II
(c) III
(d) IV

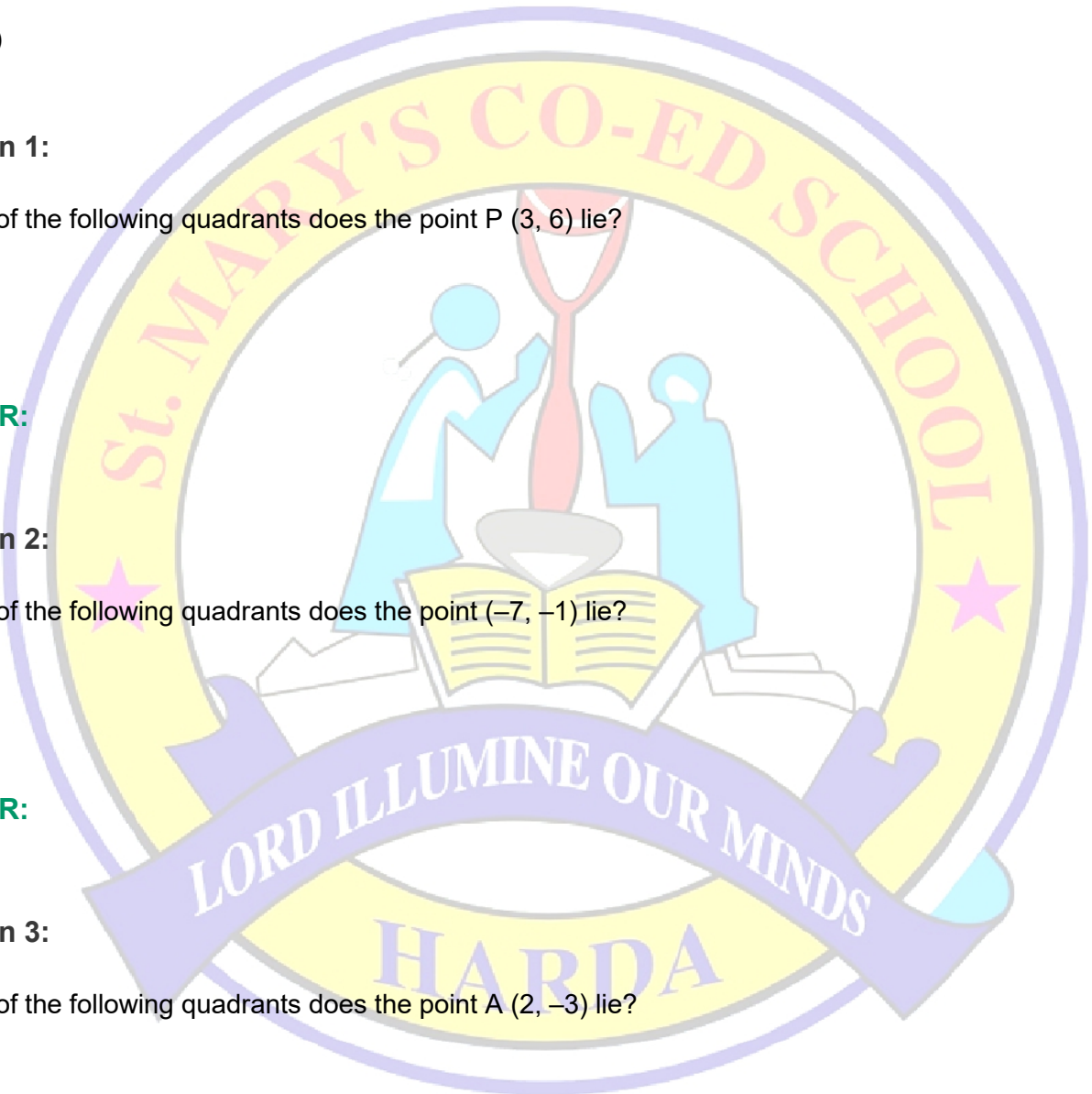
ANSWER:

- (d) IV

Question 4:

In which of the following quadrants does the point Q (-4, 1) lie?

- (a) I
(b) II



- (c) III
- (d) IV

ANSWER:

- (b) II

Question 5:

The abscissa of a point is its distance from the

- (a) origin
- (b) x-axis
- (c) y-axis
- (d) none of these

ANSWER:

- (c) y-axis

Question 6:

In which of the following quadrants does the point $(-7, -1)$ lie?

- (a) the x-axis
- (b) the y-axis
- (c) a line parallel to the y-axis
- (d) a line parallel to the x-axis

ANSWER:

- (d) a line parallel to the x-axis

Question 7:

The equation representing the y-axis is

- (a) $x = 0$
- (b) $y = 0$
- (c) $x = a$
- (d) $y = a$

ANSWER:

- (a) $x=0$

