- Subject – Mathematics
- Chapter – Co-ordinate Geometry

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Today's Targets

1. Location of a point on Number Line, Why there were need to combine such vertical and Horizontal Number Line?
2. Cartesian System, Quadrant in Cartesian plane or Coordinate Plane or xy–plane, Sign of a point in these Quadrants
3. Co-ordinate of a point in Cartesian Plane, How to figure out coordinates of a point if points are already plotted.
4. Plotting a Point in the Plane if its Coordinates are given, Image and Reflection Problems

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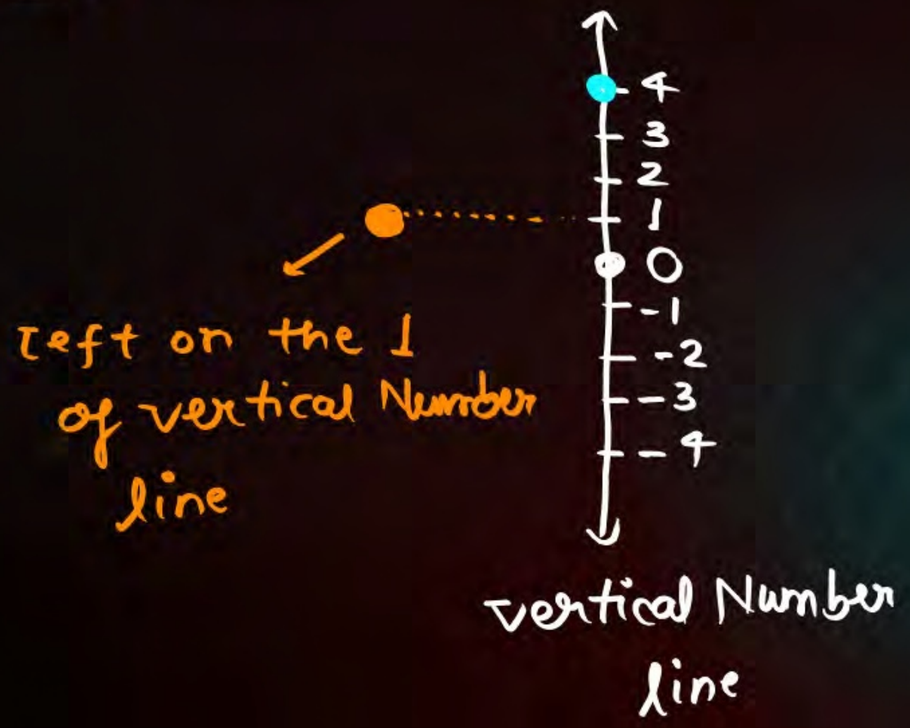
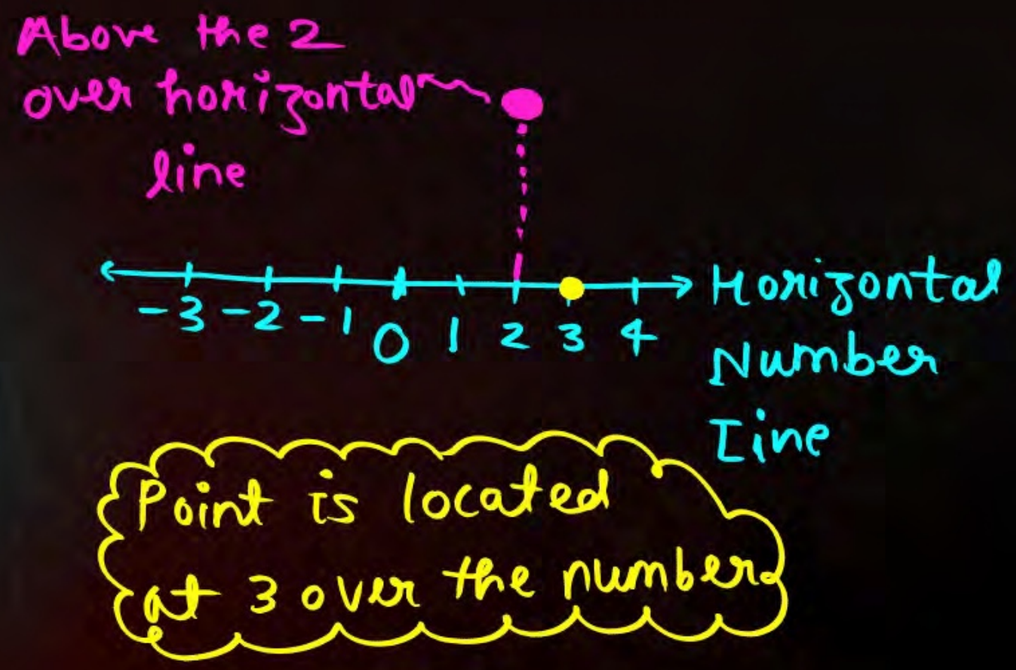
Location of a point on Number Line





Why two different Number Line Needed

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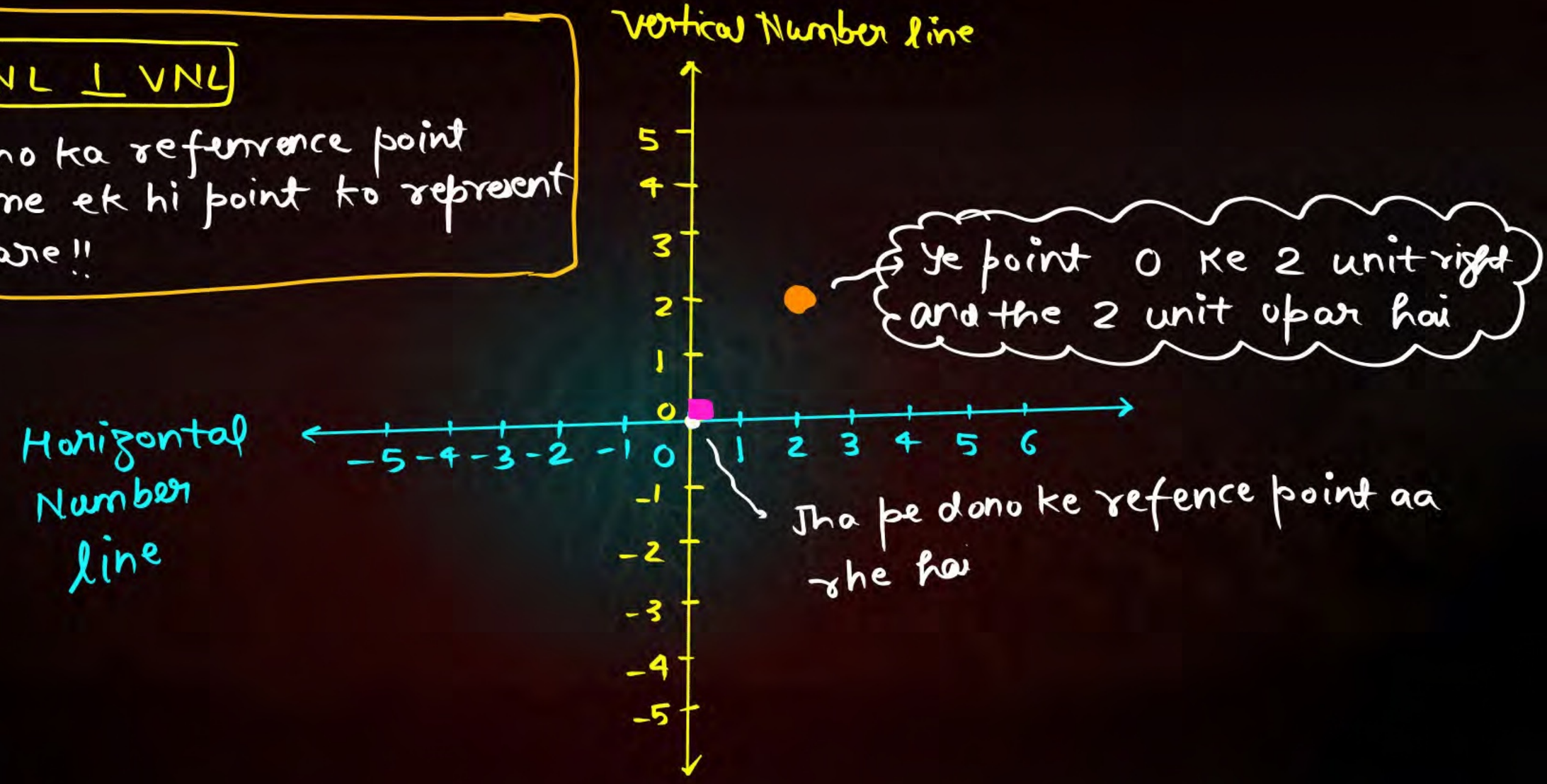
- $\boxed{HNL \perp VNL}$
- Dono ka reference point same ek hi point ko represent kare!!



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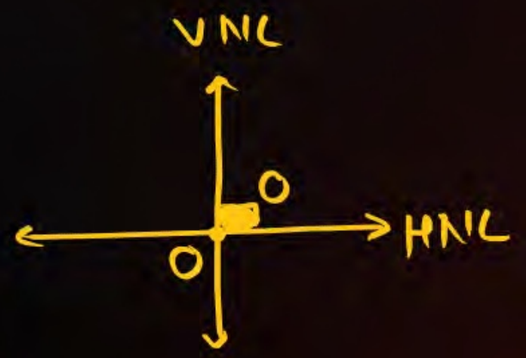
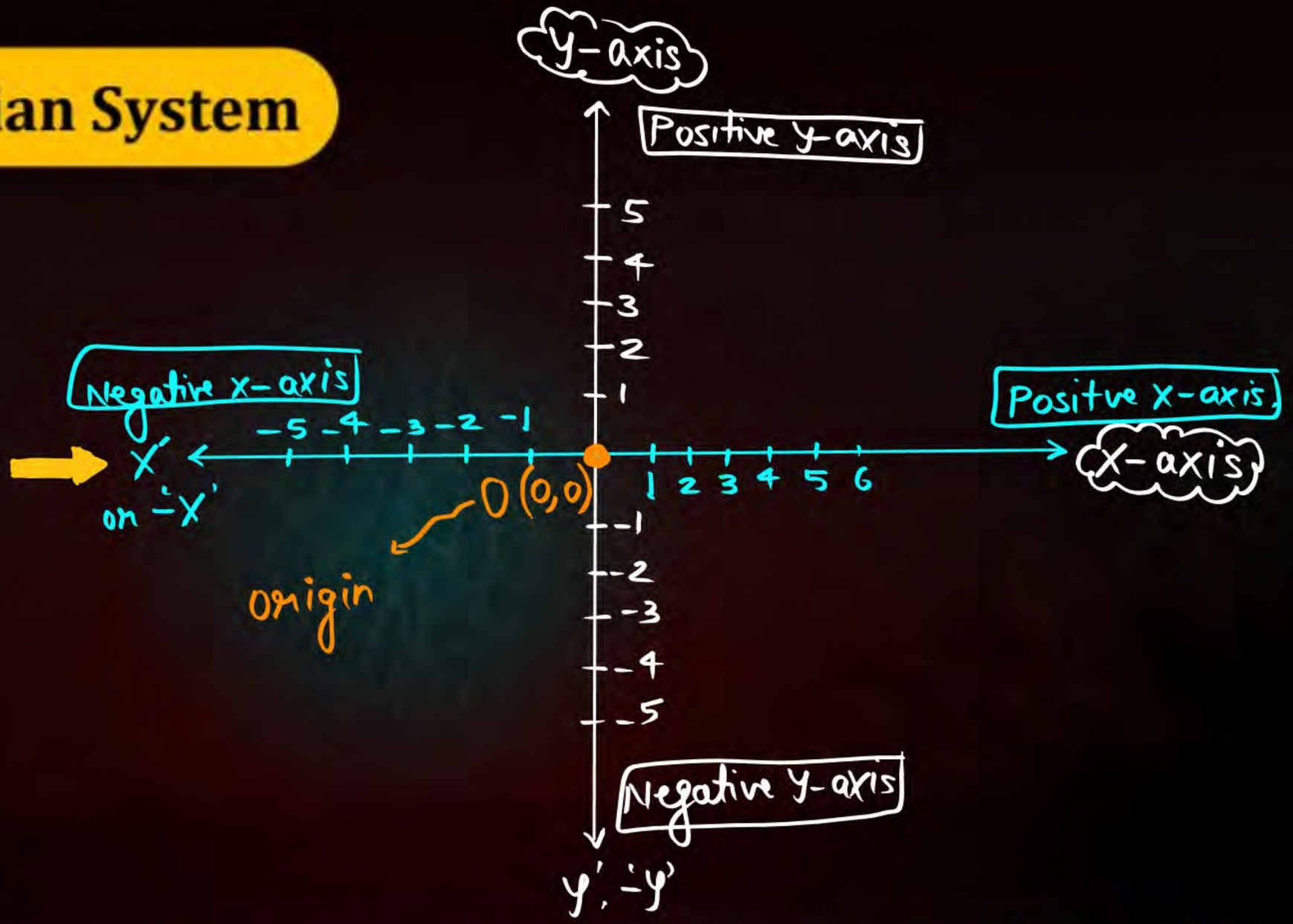
Cartesian System





Fact: The word 'Cartesian' in Cartesian system is in honour of great French mathematician Rene' Descartes'

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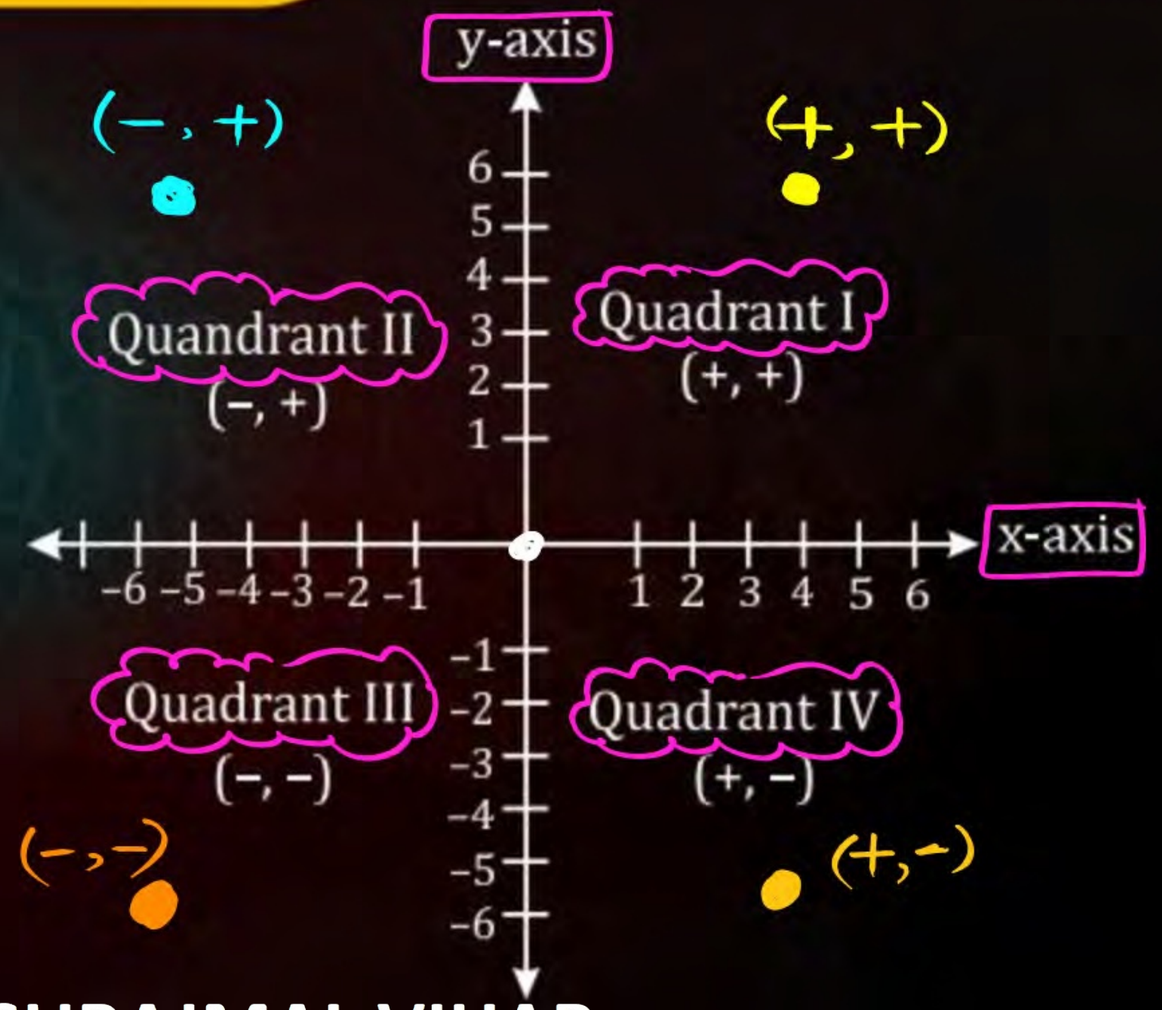
Quadrant in Cartesian plane or Coordinate Plane or xy–plane

Location of a points ⟶ coordinate



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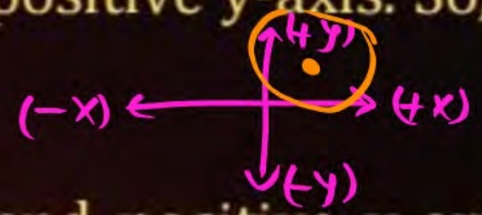
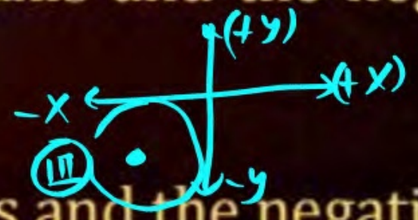
Relationship between the signs of the coordinates of a point and the quadrant of the point in which it lies

- The 1st quadrant is enclosed by the positive x-axis and positive y-axis. So, a point in the 1st quadrant is in the form (+, +).

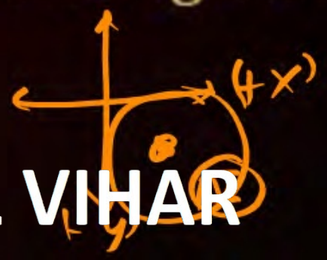


- The 2nd quadrant is enclosed by the negative x-axis and positive y-axis. So, a point in the 2nd quadrant is in the form (−, +).

- The 3rd quadrant is enclosed by the negative x-axis and the negative y-axis. So, the point in the 3rd quadrant is in the form (−, −).



- The 4th quadrant is enclosed by the positive x-axis and the negative y-axis. So, the point in the 4th quadrant is in the form (+, −).



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Co-ordinate of a point in Cartesian Plane

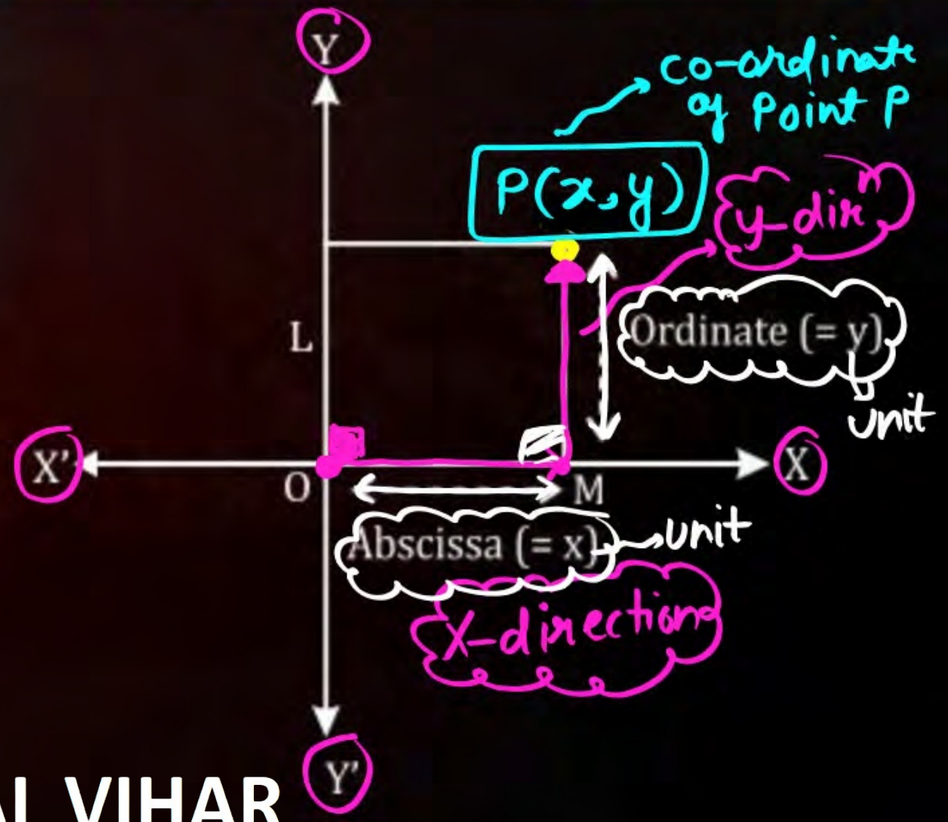
Location

- The x - coordinate of a point is marked by drawing perpendicular from the y-axis measured a length of the x-axis. It is also called the Abscissa.
- The y - coordinate of a point is marked by drawing a perpendicular from the x-axis measured a length of the y-axis. It is also called the Ordinate.
- While writing the coordinates of a point in the coordinate plane, the x - coordinate comes first, and then the y - coordinate. We write the coordinates in brackets.

Co-ordinate of a point in Cartesian Plane :

Ordered Pair ⇒

(x, y) = (Abscissa, Ordinate)



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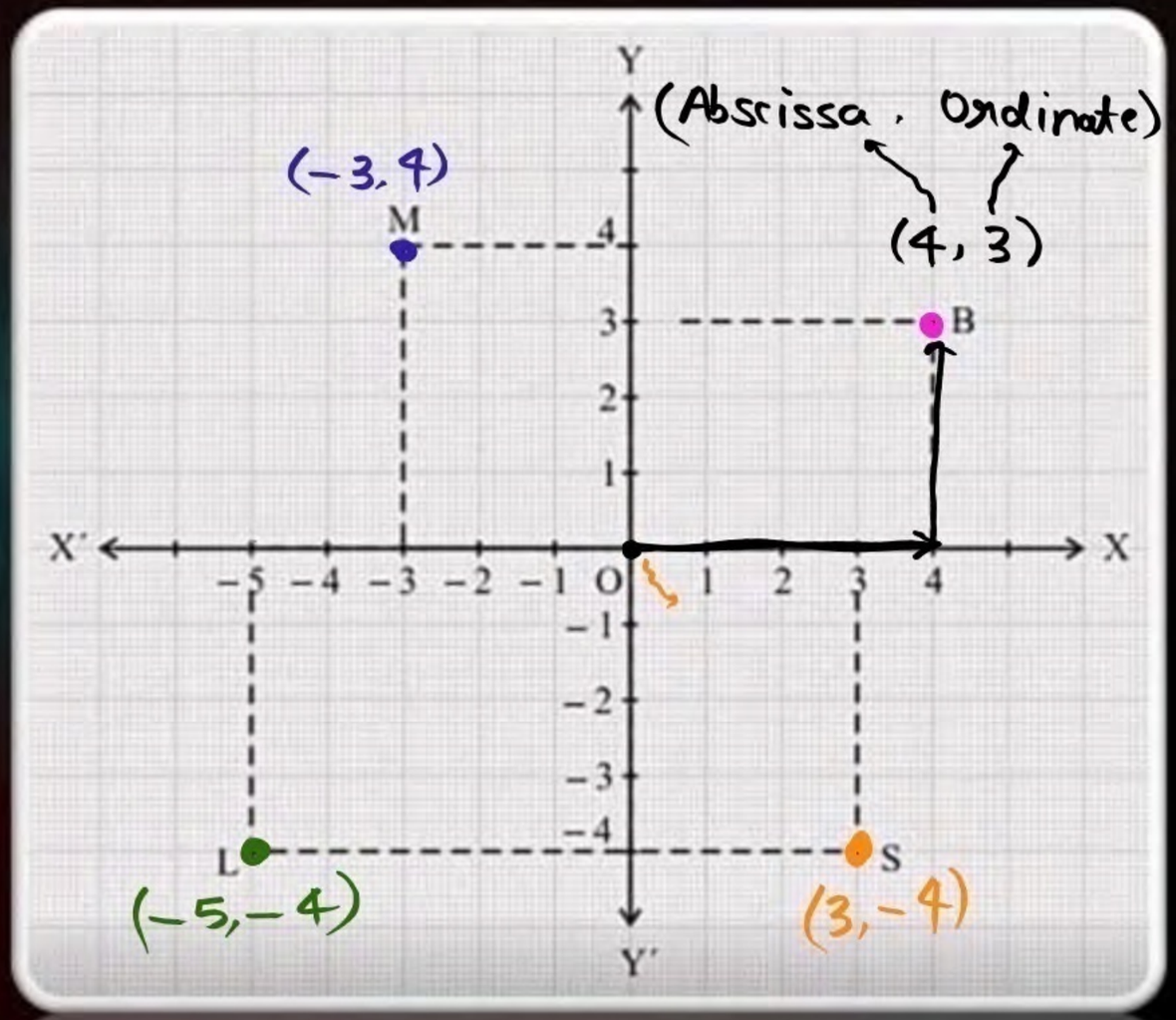
Question

Check the figure and complete the given statements

- The abscissa and the ordinate of the point B are _ and _ Hence, the coordinates of B are
- The x-coordinate and the y-coordinate of the point M are and respectively. Hence, the coordinates of M are
- The x-coordinate and the y-coordinate of the point L are _ and _ respectively. Hence, the coordinates of L are
- The x-coordinate and the y-coordinate of the point S are _ and _ respectively. Hence, the coordinates of S are



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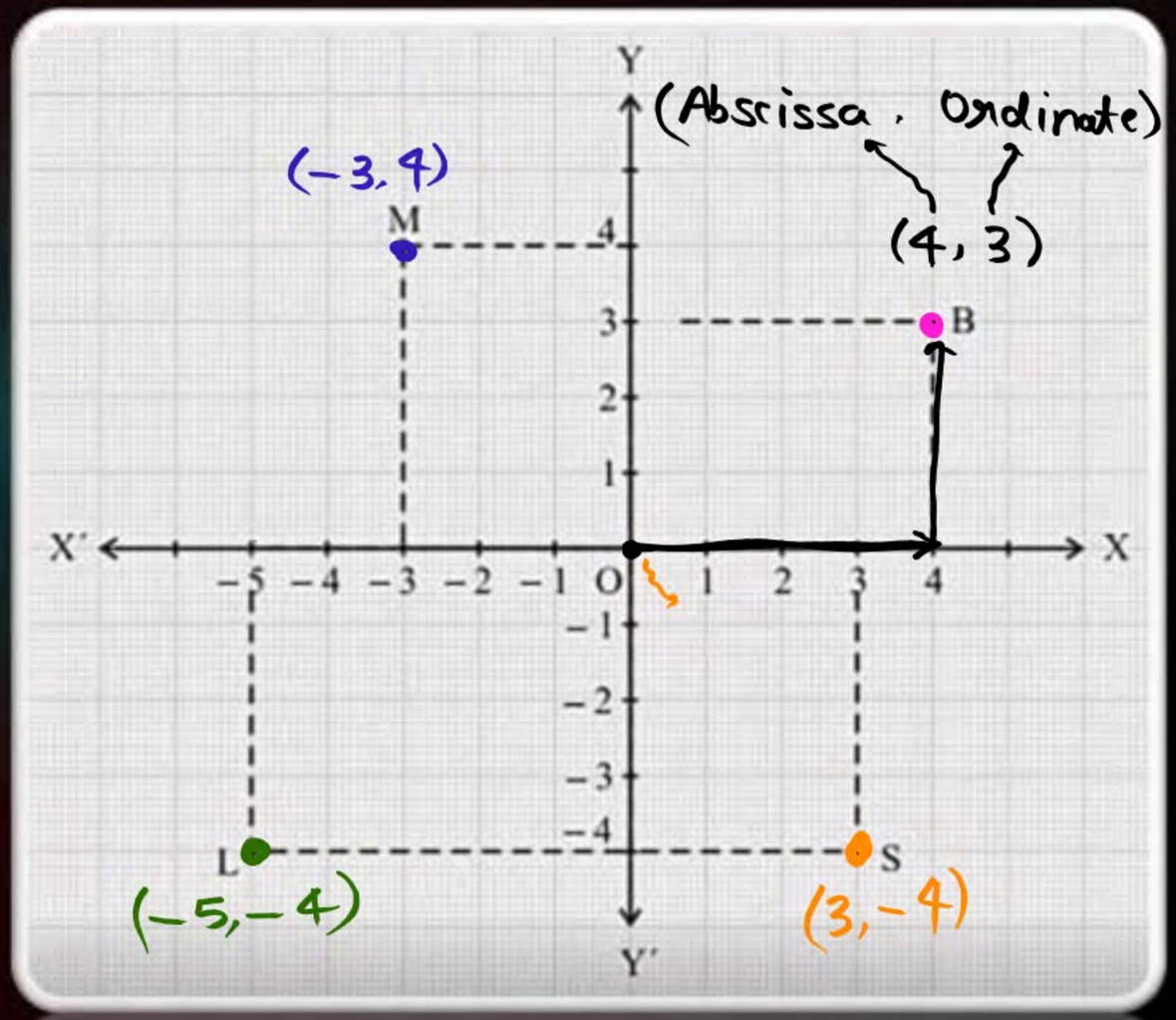
Question

Check the figure and complete the given statements

- The abscissa and the ordinate of the point B are 4 and 3 Hence, the coordinates of B are (4, 3).
- The x-coordinate and the y-coordinate of the point M are -3 and 4 respectively. Hence, the coordinates of M are (-3, 4).
- The x-coordinate and the y-coordinate of the point L are -5 and -4 respectively. Hence, the coordinates of L are (-5, -4).
- The x-coordinate and the y-coordinate of the point S are 3 and -4 respectively. Hence, the coordinates of S are (3, -4).



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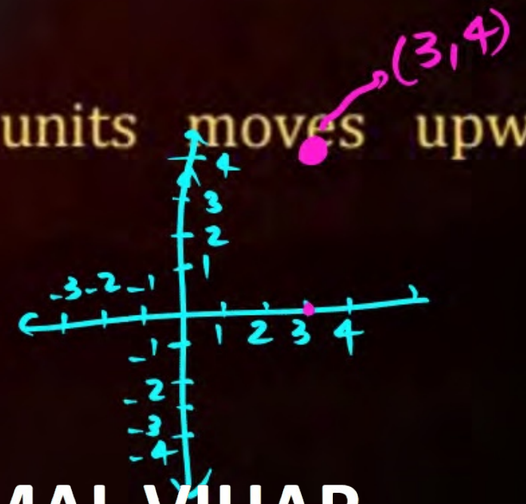
Plotting a Point in the Plane if its Coordinates are Given

Steps to plot the point $\boxed{(x,y)}$ on the Cartesian plane -

(3, 4)
→ y-coordinate / Ordinate
→ x-coordinate / Abscissa

- First of all, we need to draw the Cartesian plane by drawing the coordinate axes with 1 unit = 1 cm.
- To mark the x coordinates, starting from 0 moves towards the positive/Negative x-axis and count to x units.
- To mark the y coordinate, starting from x units moves upwards in the positive/Negative direction and count to y units.
- Now this point is the coordinate (x, y).



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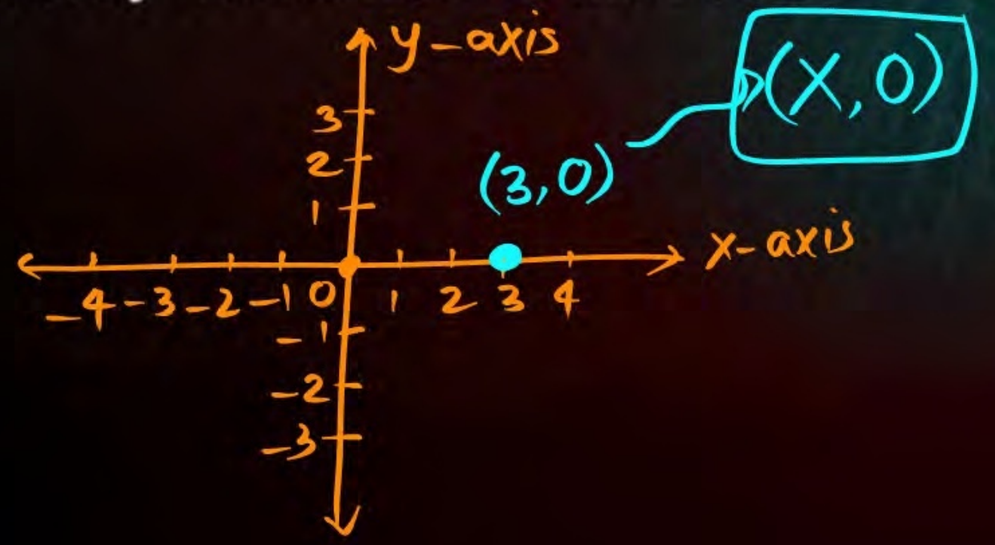
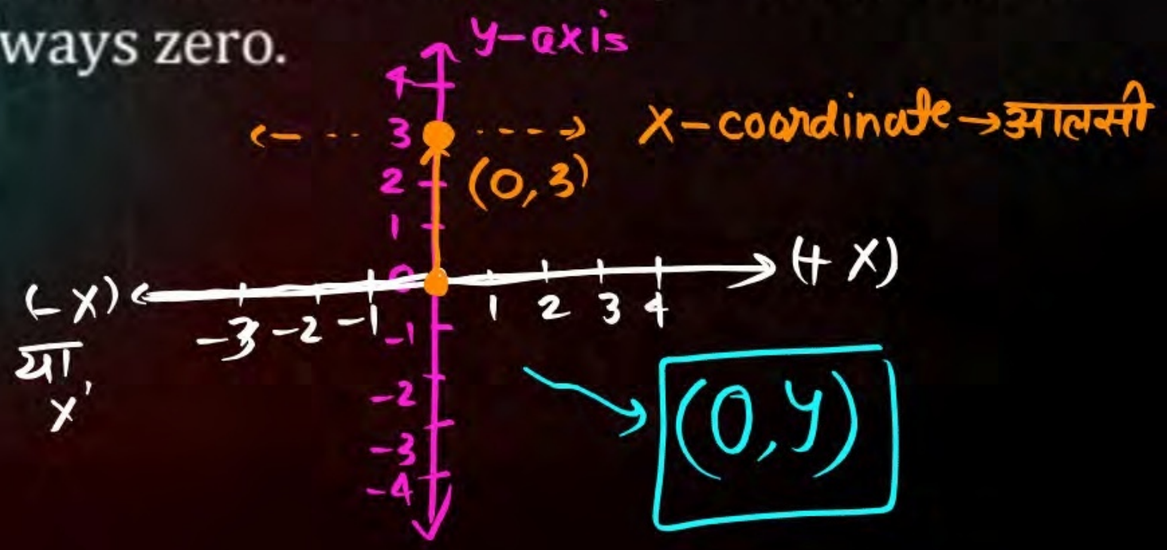
ONE LEVEL UP

- The Point lying on the Y-axis means there is no movement toward x –direction. It means the x-coordinate of the Point will be always zero.

- The Point lying on the X-axis means there is no movement toward y –direction. It means the y-coordinate of the Point will be always zero.

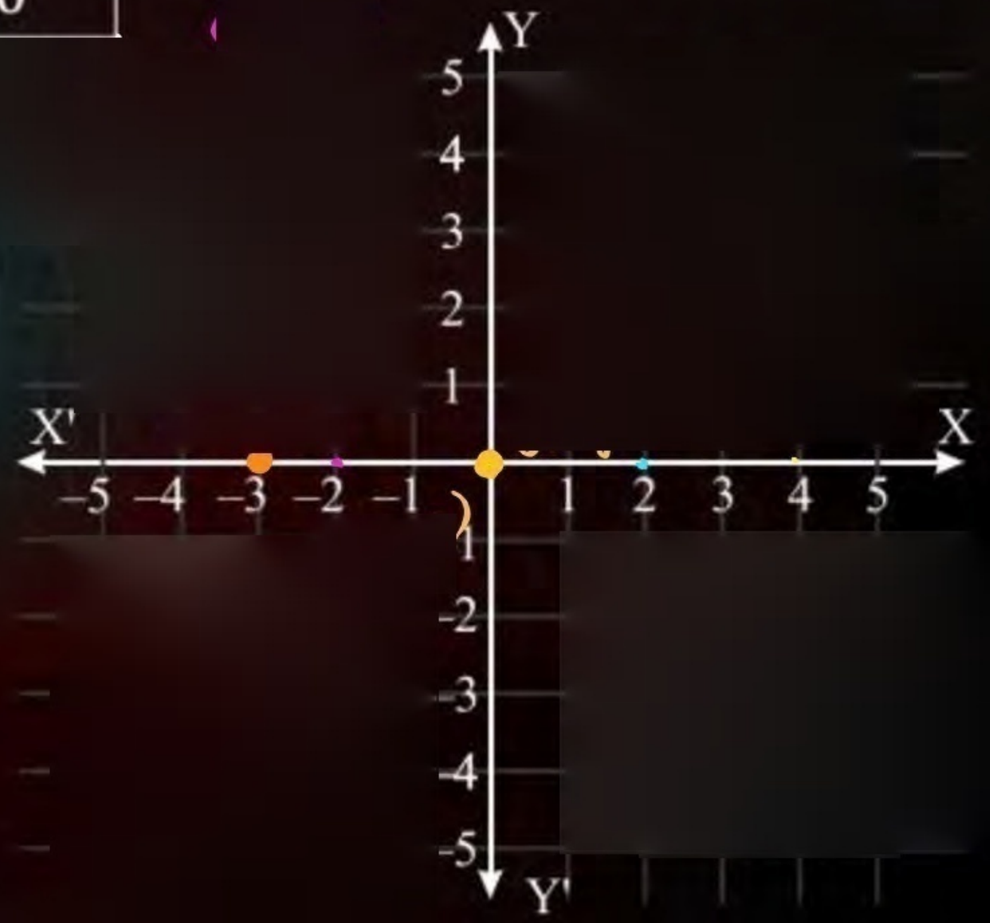




Question

Plot the points (x, y) given by the following table

x	2	4	-3	-2	3	0
y	4	2	0	5	-3	0



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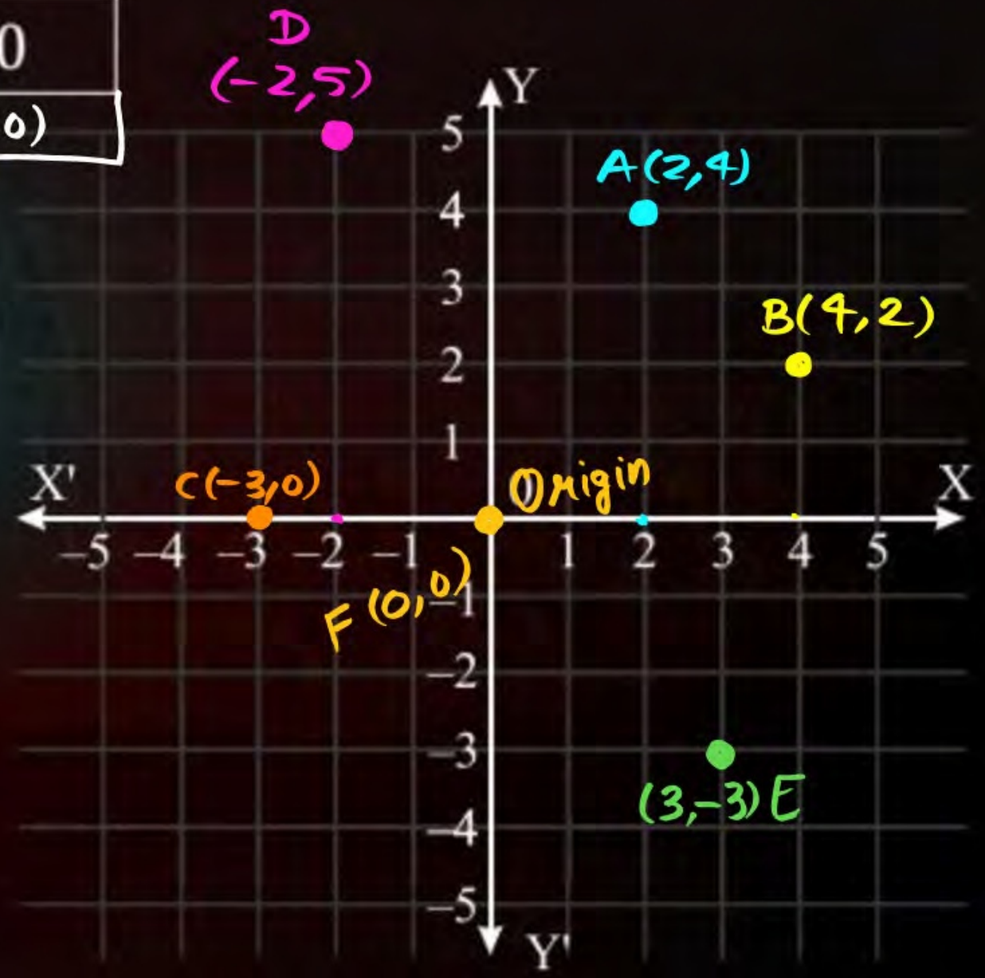
Question

Plot the points (x, y) given by the following table

x	2	4	−3	−2	3	0
y	4	2	0	5	−3	0
(x,y)	(2,4)	(4,2)	(−3,0)	(−2,5)	(3,−3)	(0,0)
	A	B	C	D	E	F



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Question

In which quadrant or on which axis do each of the point (−2, 4), (3,−1), (−1, 0), (1, 2) and (−3,−5) lie? Verify your answer by locating them on the Cartesian plane.

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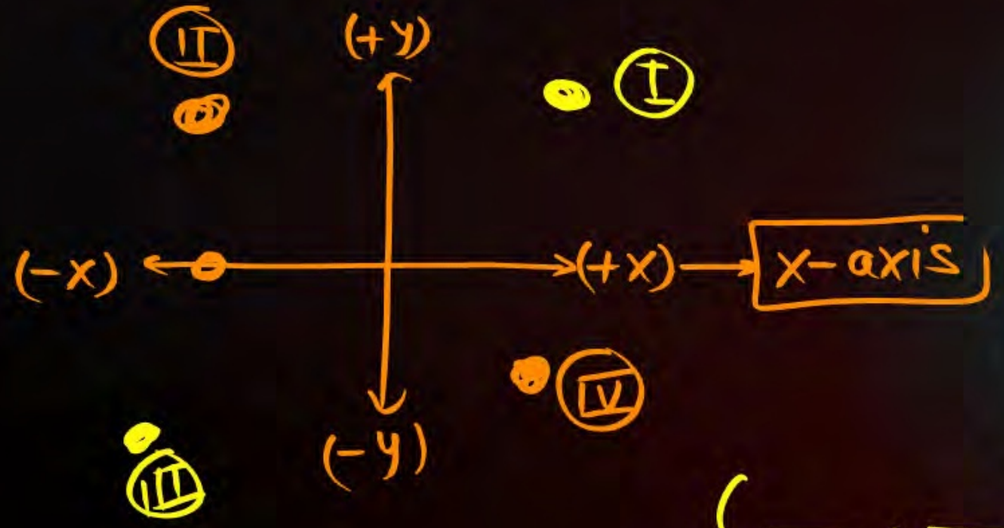
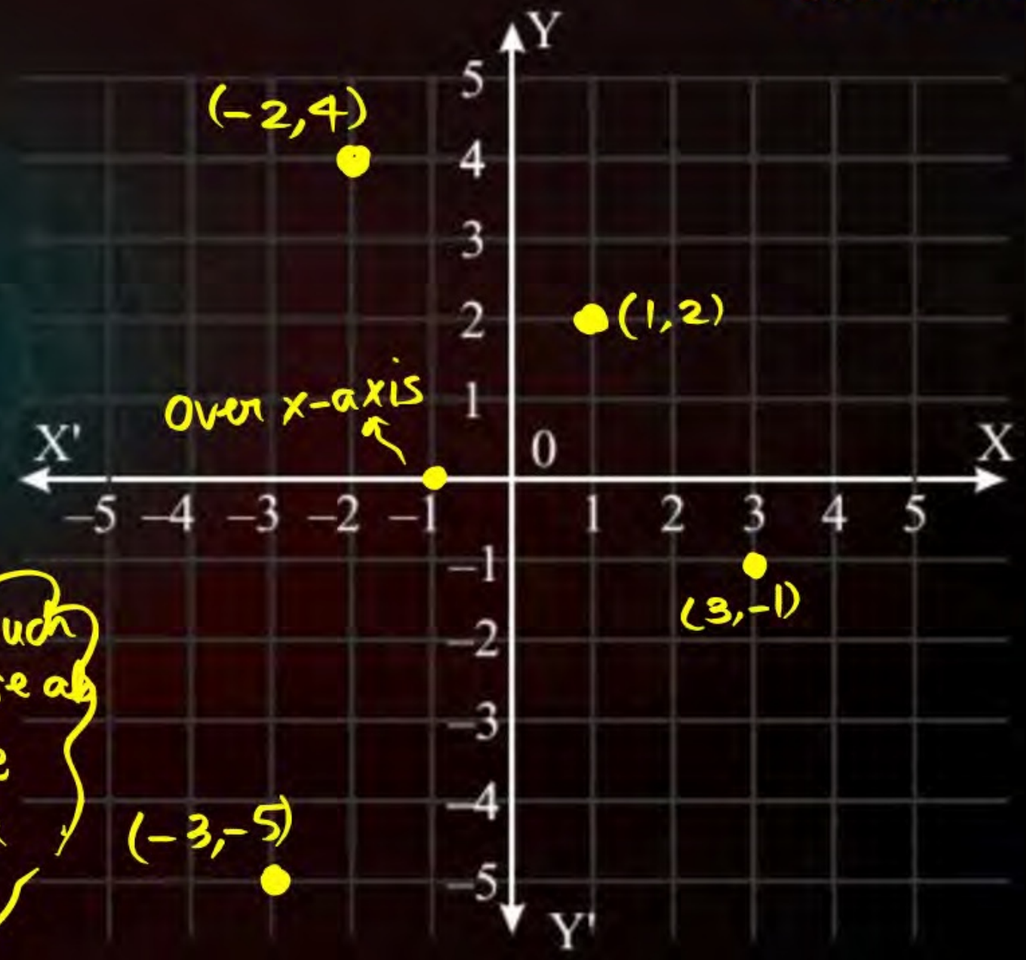
II IV I y-axis III over (−) x-axis



(___ , ___)

origin se start kar ke → x-direction me move karna hai

Jha tak pahuch gye vha se ab y-dir^n me move karna hai!!



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Question

Point (−3, 5) lies in the

A First Quadrant

B Second Quadrant

C Third Quadrant

D Fourth Quadrant

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Question

Point (−3, 5) lies in the

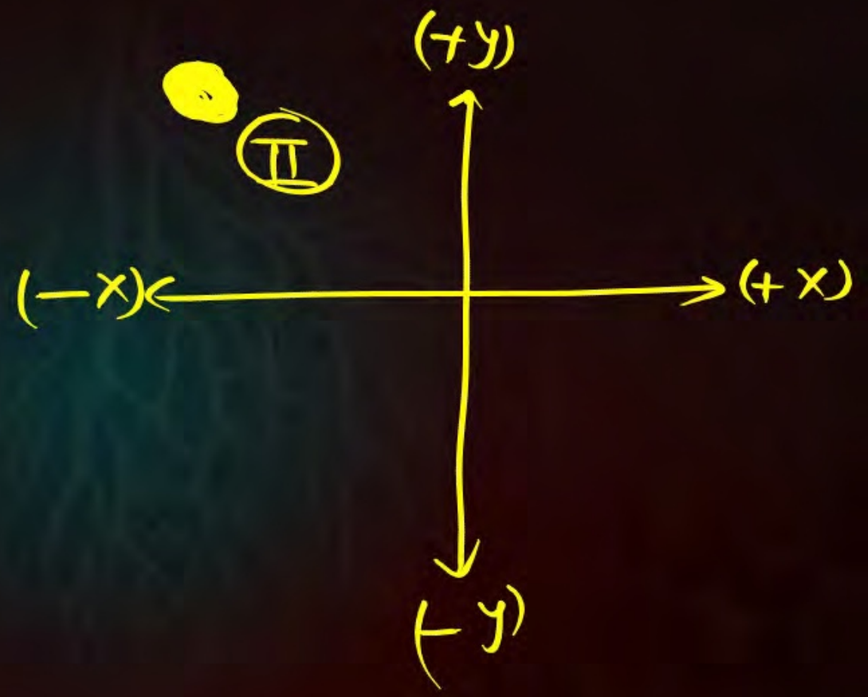
(−, +)

A First Quadrant

B Second Quadrant

C Third Quadrant

D Fourth Quadrant



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Question

Point $(-10, 0)$ lies

A. On the negative direction of the $x-$ axis

B. On the negative direction of the $y-$ axis

C. In the third quadrant

D. In the fourth Quadrant

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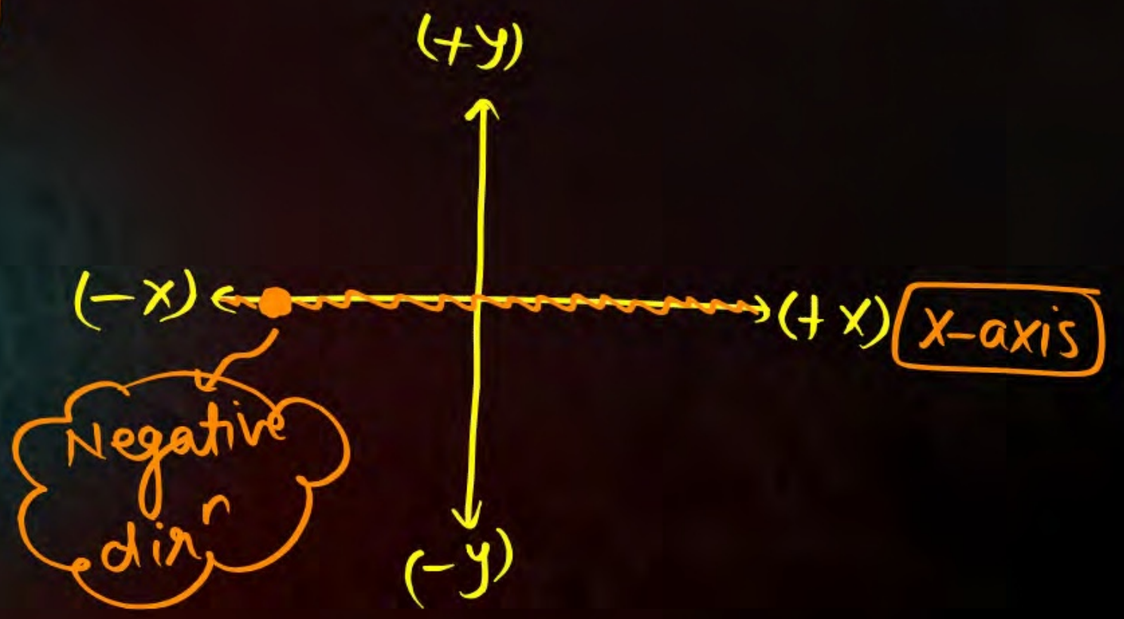

Question

Abscissa of all the points on the x–axis is

A. 0

B. 1

C. 2

D. Any Number

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Question

Abscissa of all the points on the x-axis is

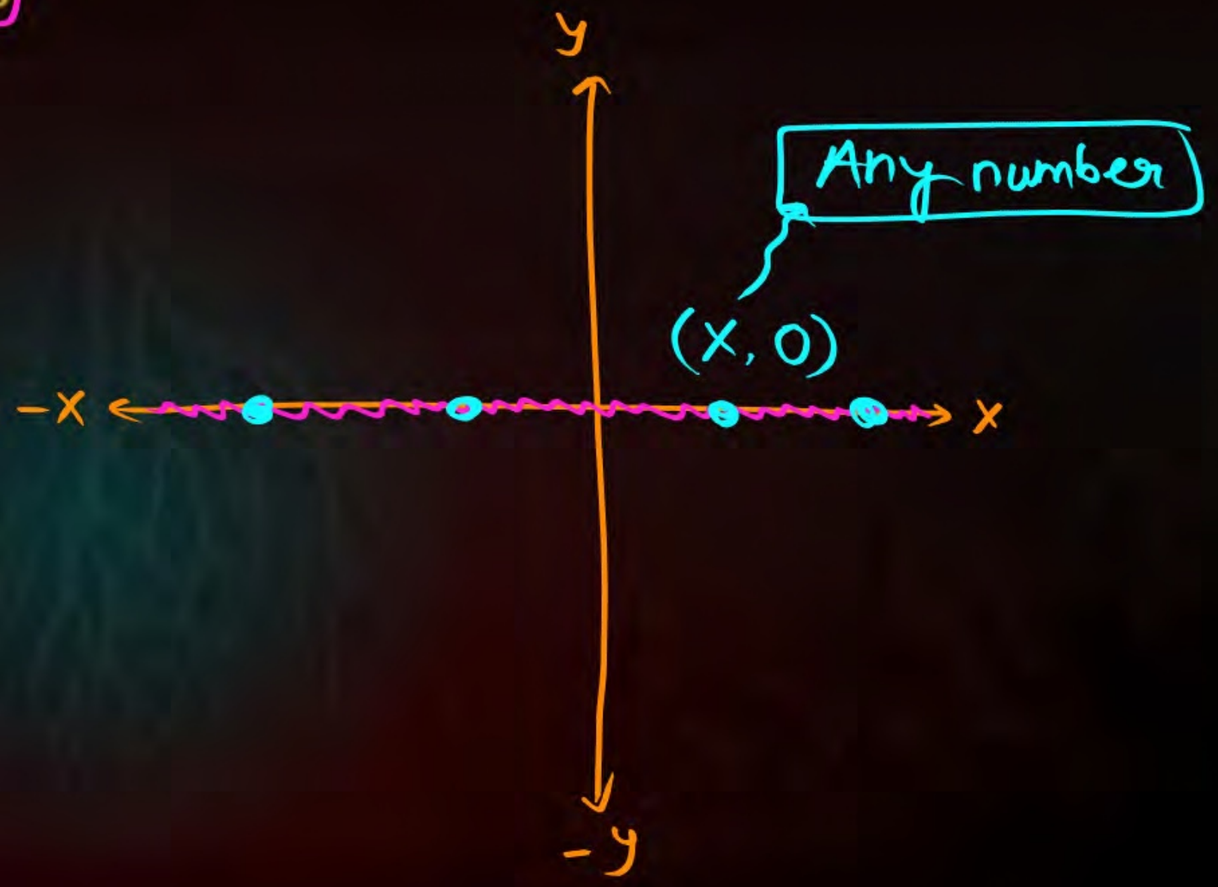
↳ x-coordinate

A. 0

B. 1

C. 2

D. Any Number ✓



Question

The point at which the two coordinates axes meet is called the

Abscissa

Ordinate

Origin

Quadrant

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Question

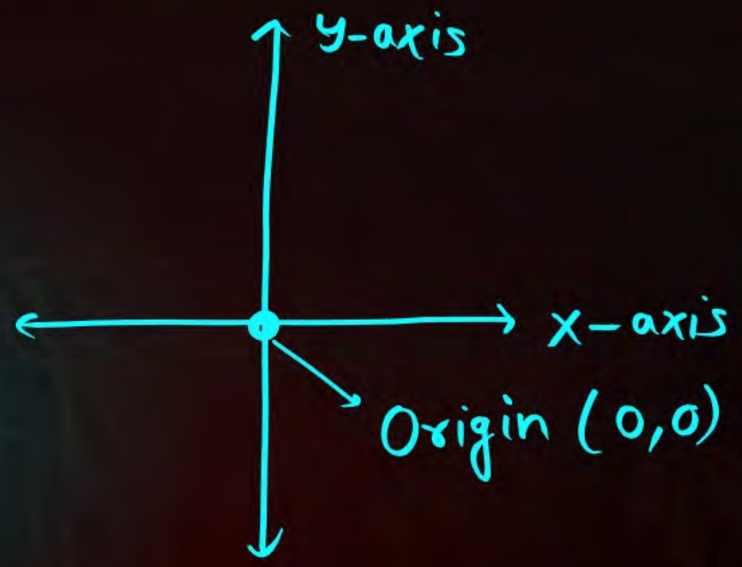
The point at which the two coordinates axes meet is called the

A. Abscissa

B. Ordinate

C. Origin

D. Quadrant



Question

Abscissa of a point is positive in

A. I and II Quadrant

B. I and IV Quadrant

C. I Quadrant Only

D. IV Quadrant Only

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Question

The point whose ordinate is 4 which lies on y-axis is

(4,0)

(0, 4)

(1, 4)

(4.2)

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Question

The point whose ordinate is 4 which lies on y-axis is

y-coordinate

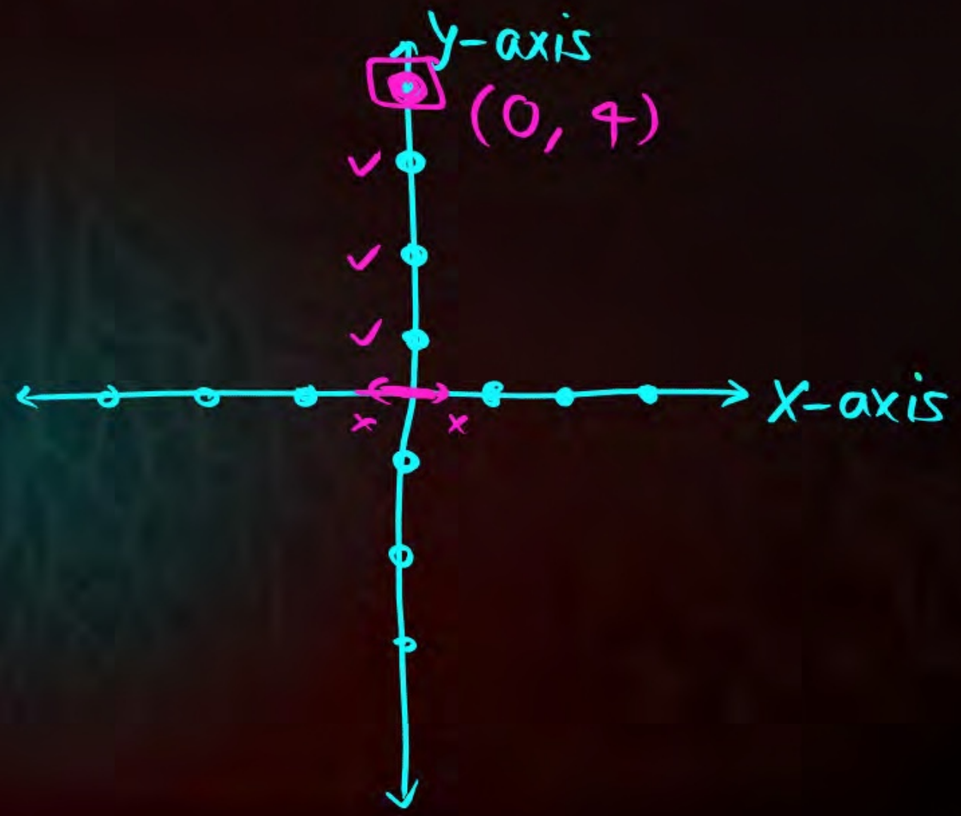
A (4,0)

B (0,4)

C (1,4)

D (4.2)

(0, 4)



Question

The point of the form (a, a) always lies on

$x - \text{axis}$

$y - \text{axis}$

On the line $y = x$

On the line $x + y = 0$

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Question

(-5,-5)

The point of the form (a, a) always lies on

(2 ,2)

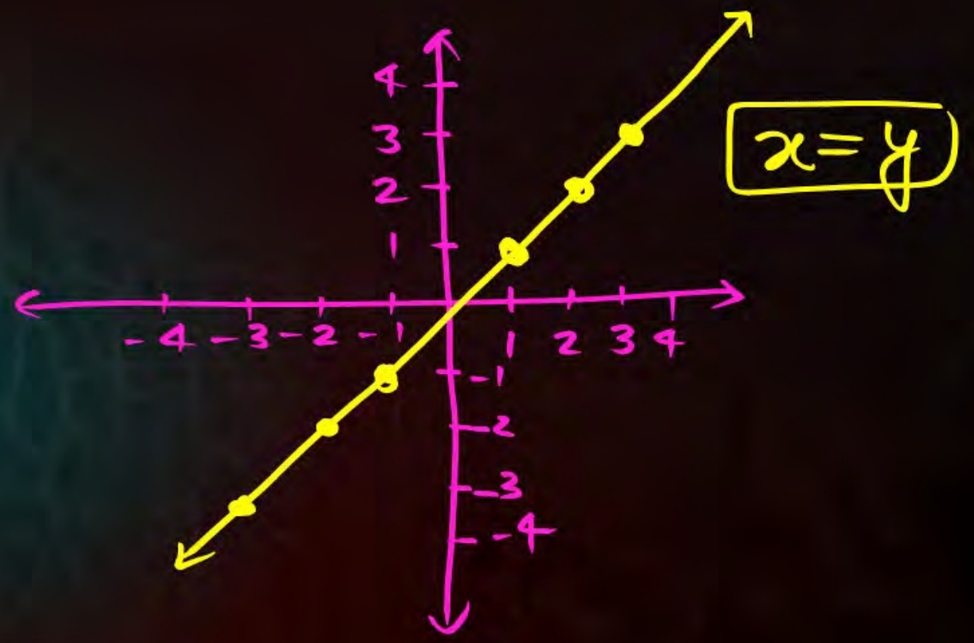
A x − axis

B y − axis

C On the line y = x

D On the line x + y = 0

$x = -y$



Question

If the y coordinate of a point taken as zero, then this Point always lies

In I Quadrant

On y – axis

On x – axis

In II Quadrant

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Question

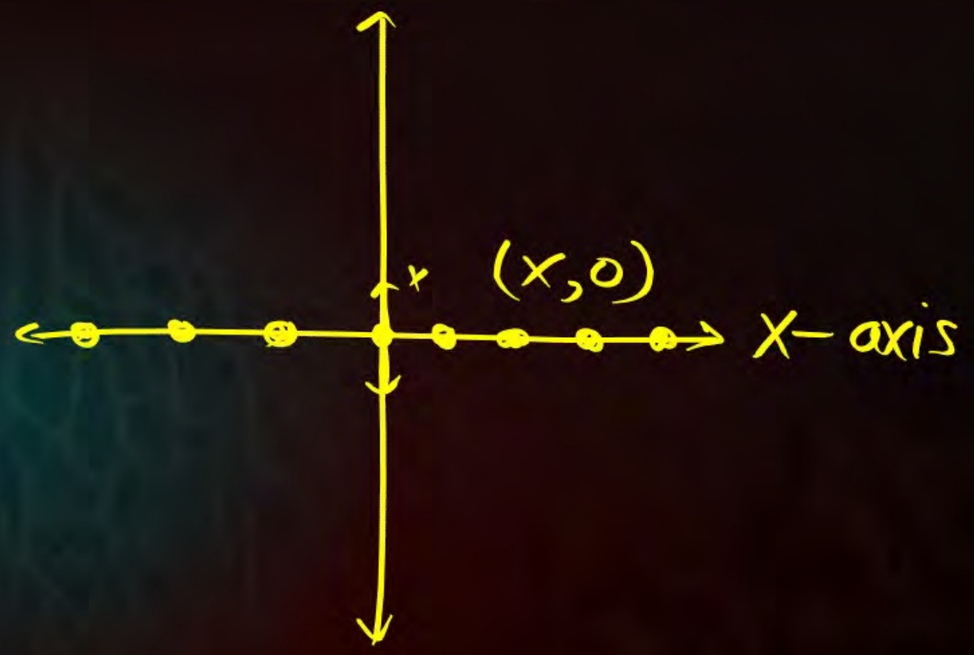
If the y coordinate of a point taken as zero, then this Point always lies

A. In I Quadrant

B. On y – axis

C. On x – axis

D. In II Quadrant



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Question

If the coordinates of the two points are $P(-2, 3)$ and $Q(-3, 5)$, then calculate the value of (abscissa of P)−(abscissa of Q).

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Question

If the coordinates of the two points are $P(-2, 3)$ and $Q(-3, 5)$, then calculate the value of (abscissa of P)−(abscissa of Q).

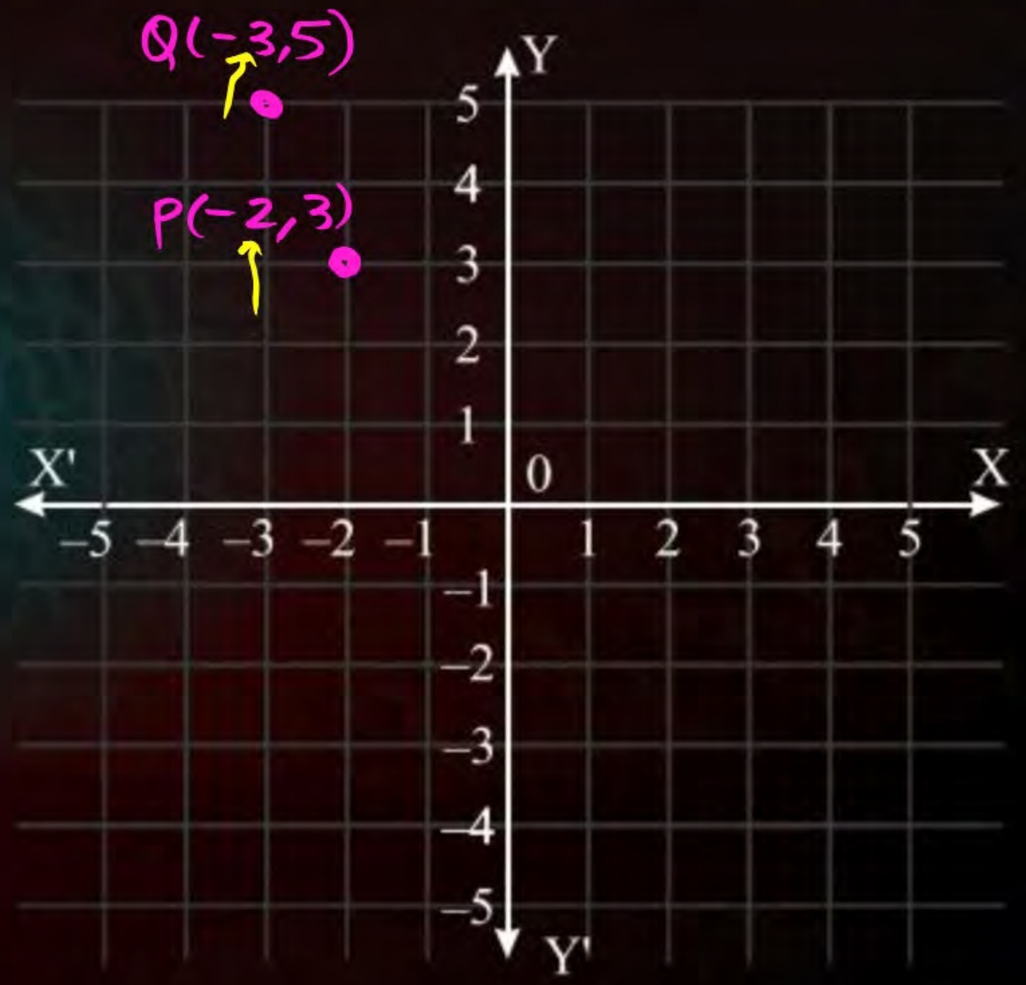
$= \left(\text{x-coordinate of P}\right) - \left(\text{x-coordinate of Q}\right)$

$= (-2) - (-3)$

$= -2 + 3$

$= 3 - 2$

$= \boxed{1}$ Ans.



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Question

A point lies on the x-axis at a distance of 7 units from the y-axis. What are its coordinates? What will be the coordinates if it lies on y-axis at a distance of −7 units from x-axis?

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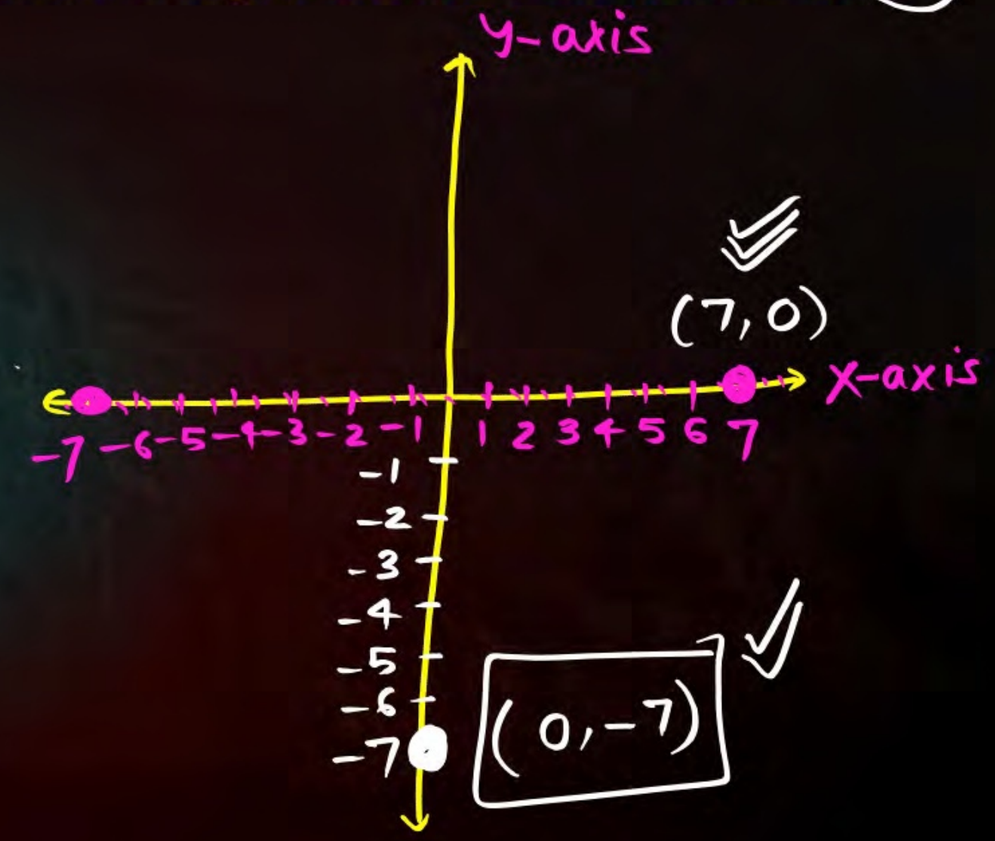

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Question

If P(−1,1), Q(3,−4), R(1,−1), S(−2,−3) and T(−4,4) are plotted on the graph paper, then the point(s) in the fourth quadrant are

P and T

Q and R

Only S

P and R

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Question

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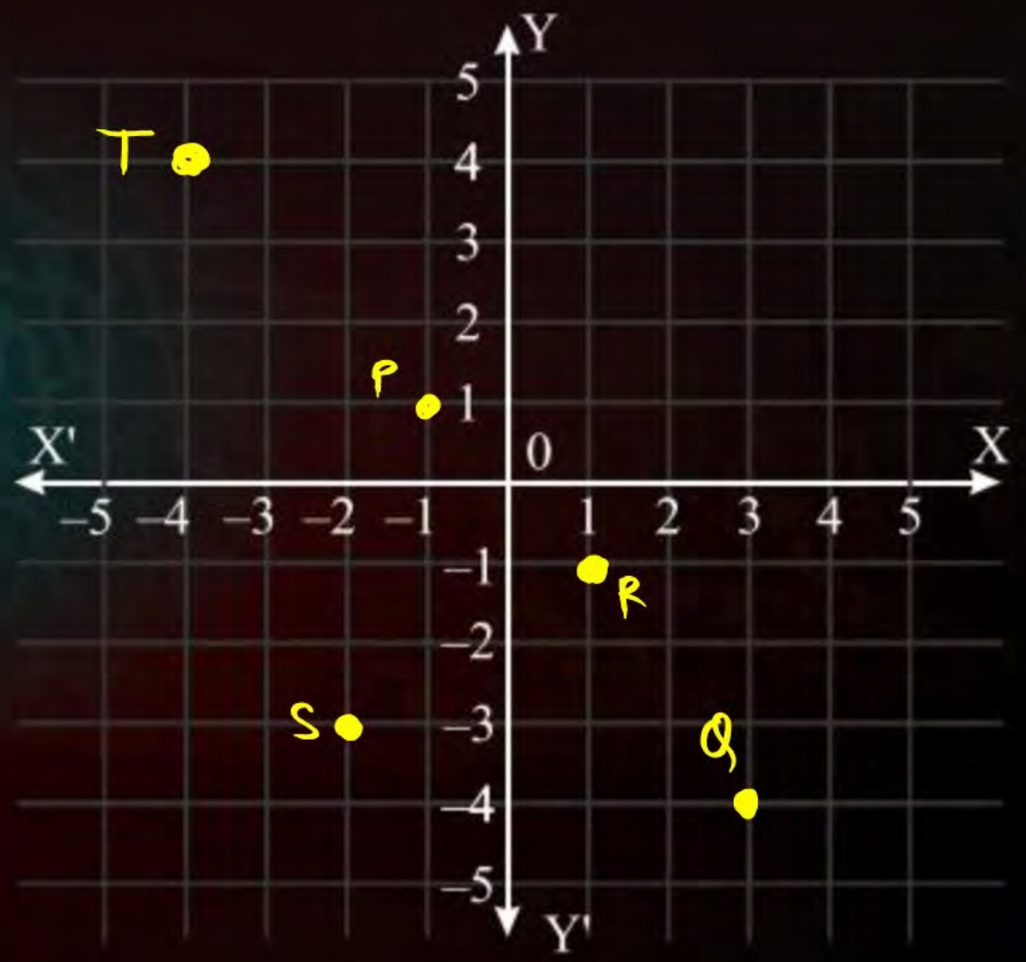
A. P and T

B. Q and R

C. Only S

D. P and R



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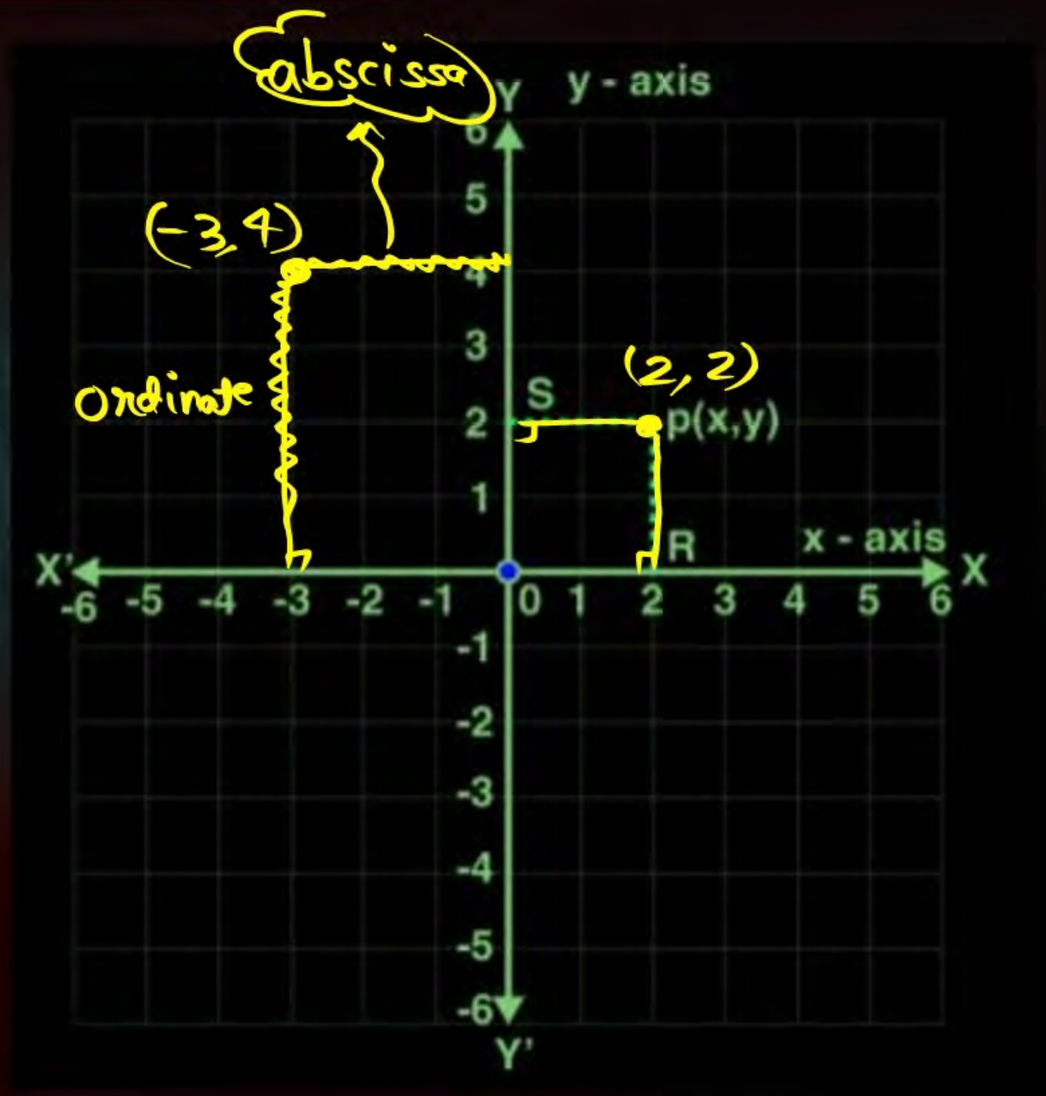
Cartesian Co-ordinates of a point

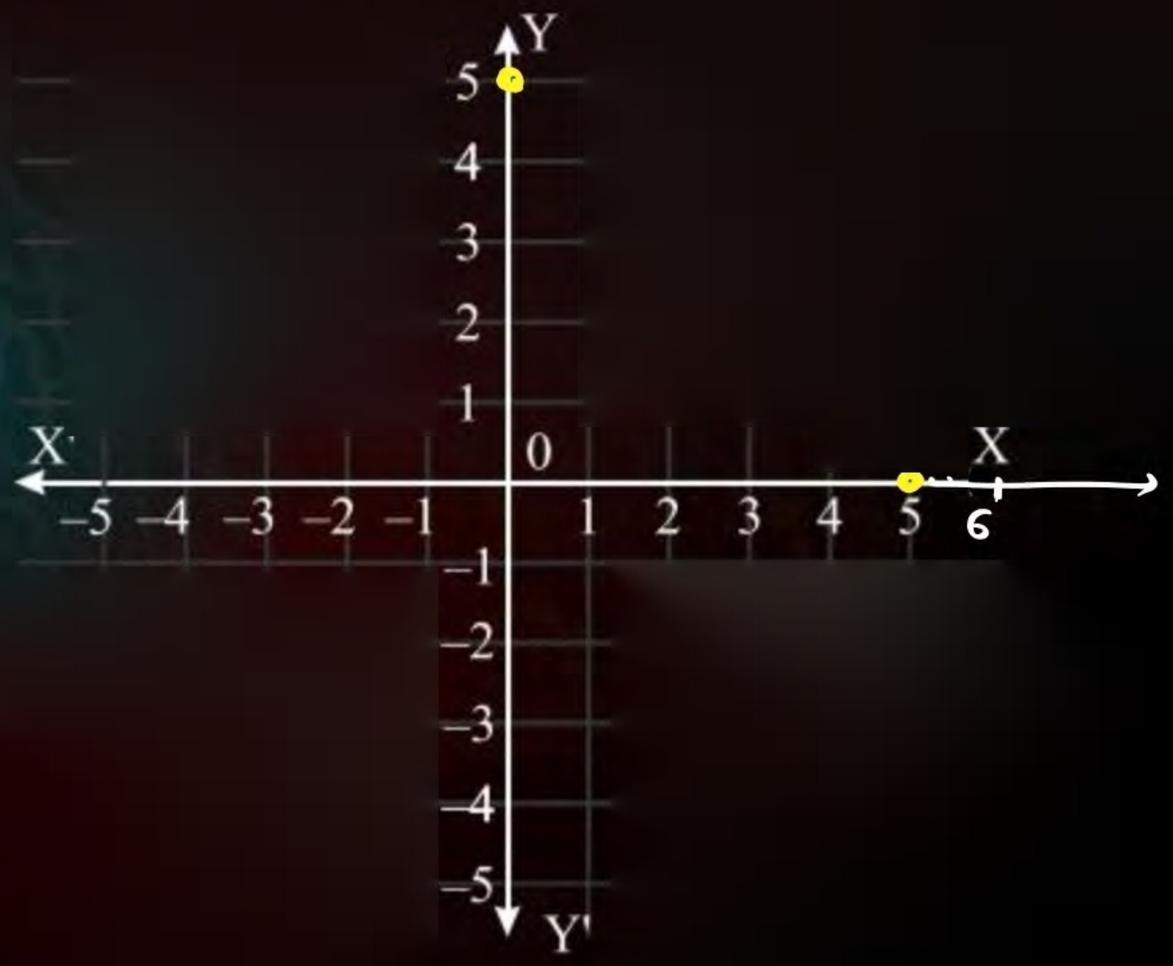
The length of the line segment OR is called the X –coordinate or abscissa of point P and the length of the line segment OS is called the Y –coordinate or ordinate of point P.

Thus, for any given point, the abscissa and ordinate are the distance of a given point from the X –axis and Y –axis, respectively. The position of point P is given as (x, y).



Question

Locate the point (5, 0), (0, 5), (2, 5), (5, 2), (−3, 5), (−3, −5), (5, −3) and (6, 1) in cartesian plane.



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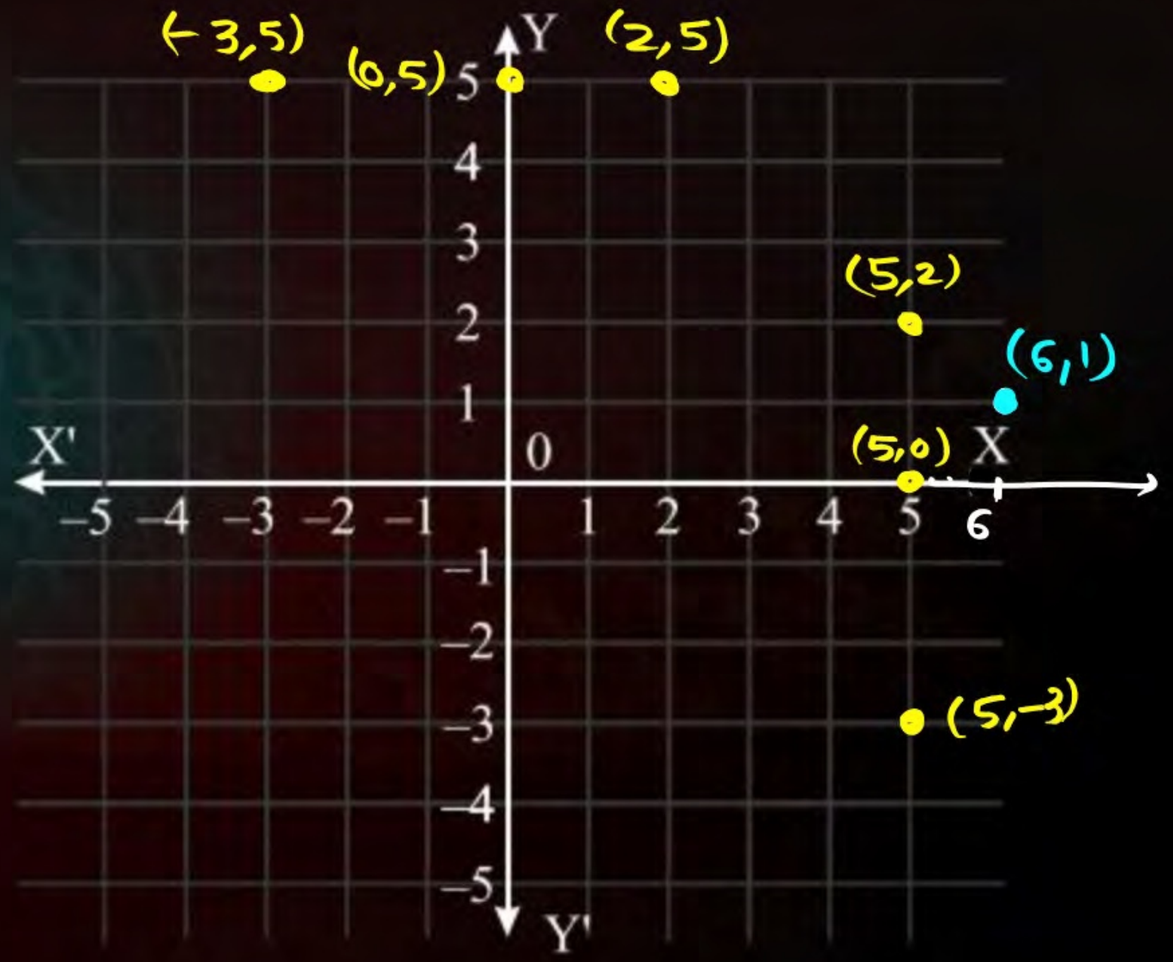

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Question

Find the values of x and y, if two ordered pairs $(x - 3, -6)$ and $(4, x + y)$ are equal.

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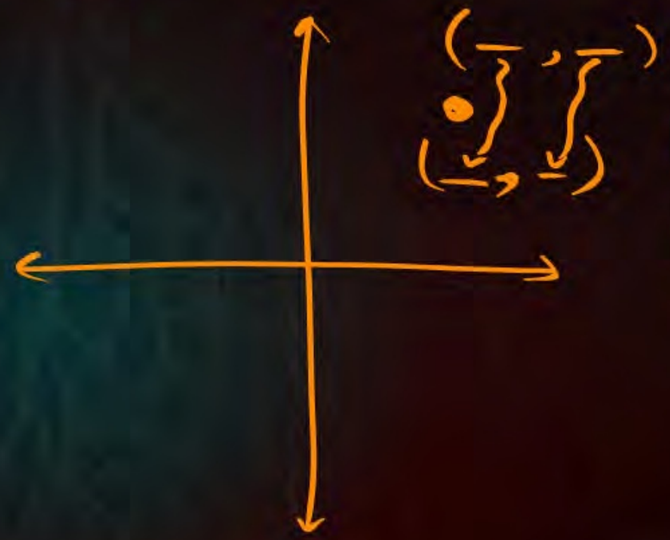
Question

Find the values of x and y, if two ordered pairs $(x - 3, -6)$ and $(4, x + y)$ are equal. (Most Imp.)

(x-coordinate, y-coordinate)

Ye dono ke dono co-ordinate same Point ko dikhayenge!!



$(x-3, 6) = (4, x+y)$

On comparing x-coordinate

$x - 3 = 4 \Rightarrow \boxed{x = 7}$

On comparing y-coordinate

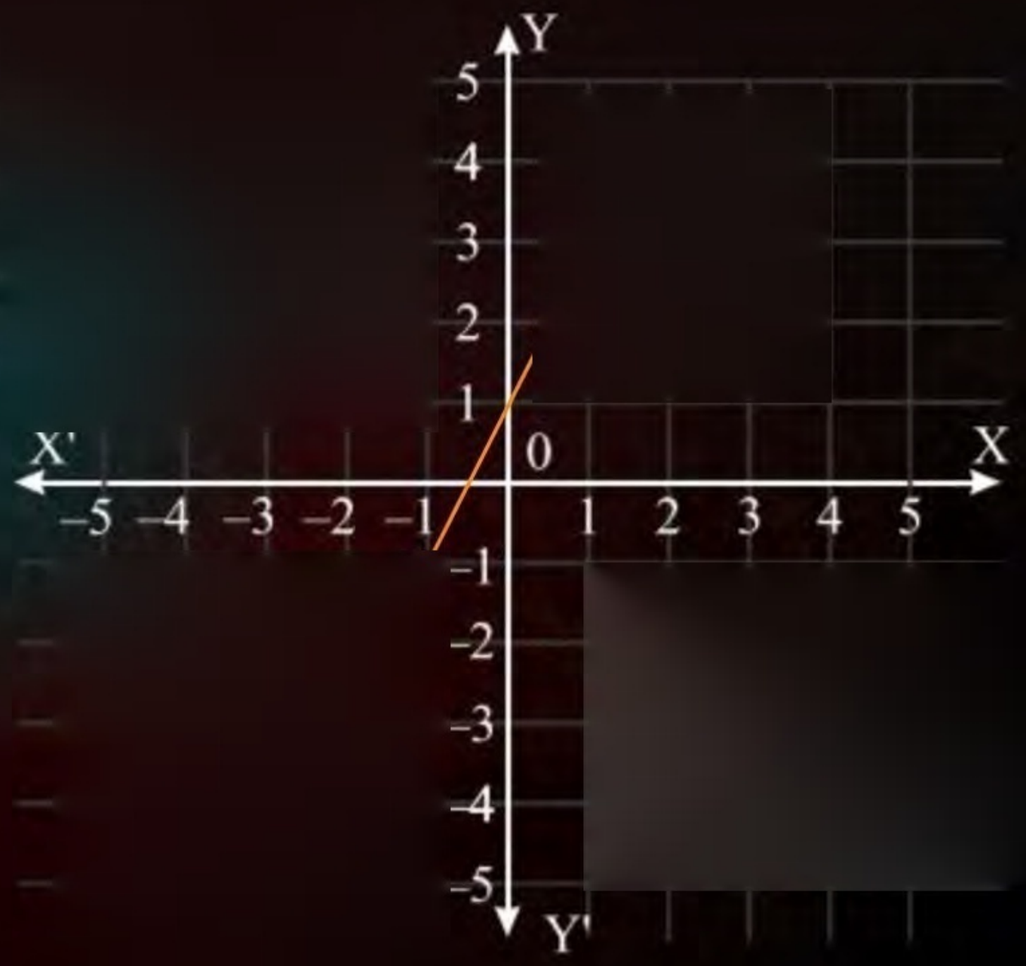
$6 = x + y$

$6 = 7 + y \Rightarrow \boxed{y = -1}$

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Plot the following points and check whether they are collinear or not: (1, 3), (−1, −1), (−2, −3).

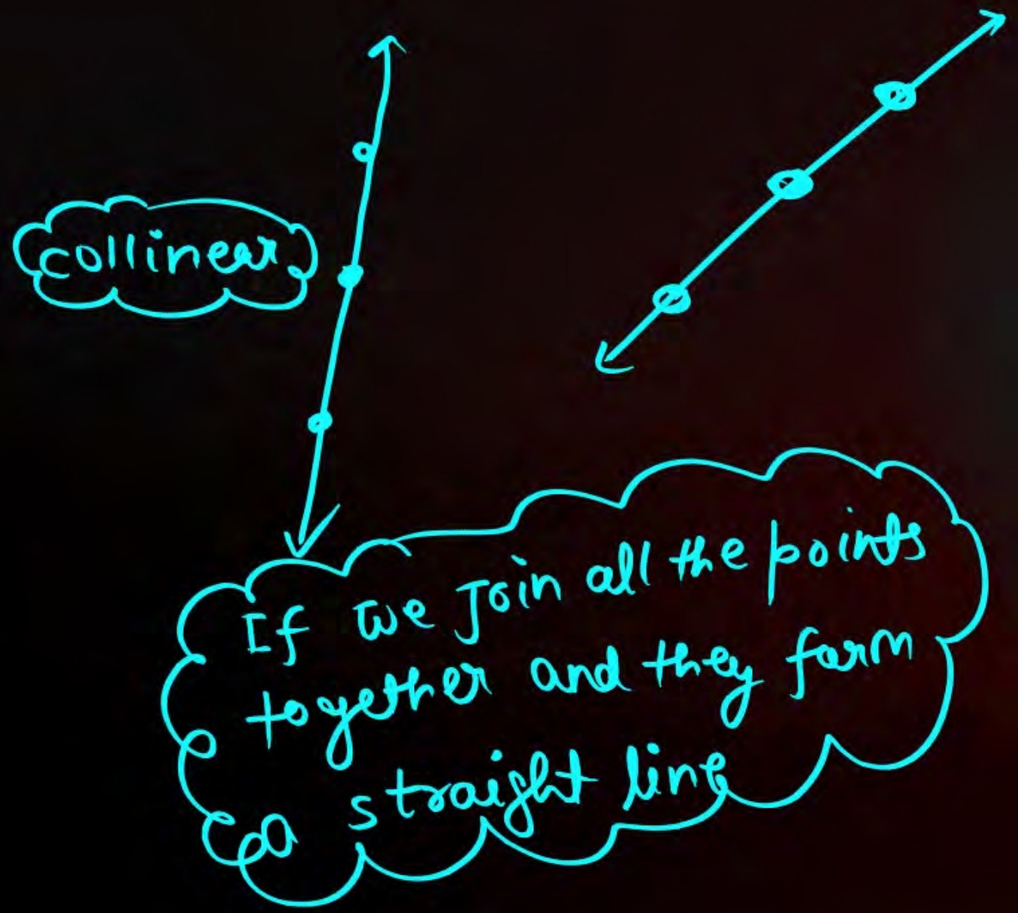


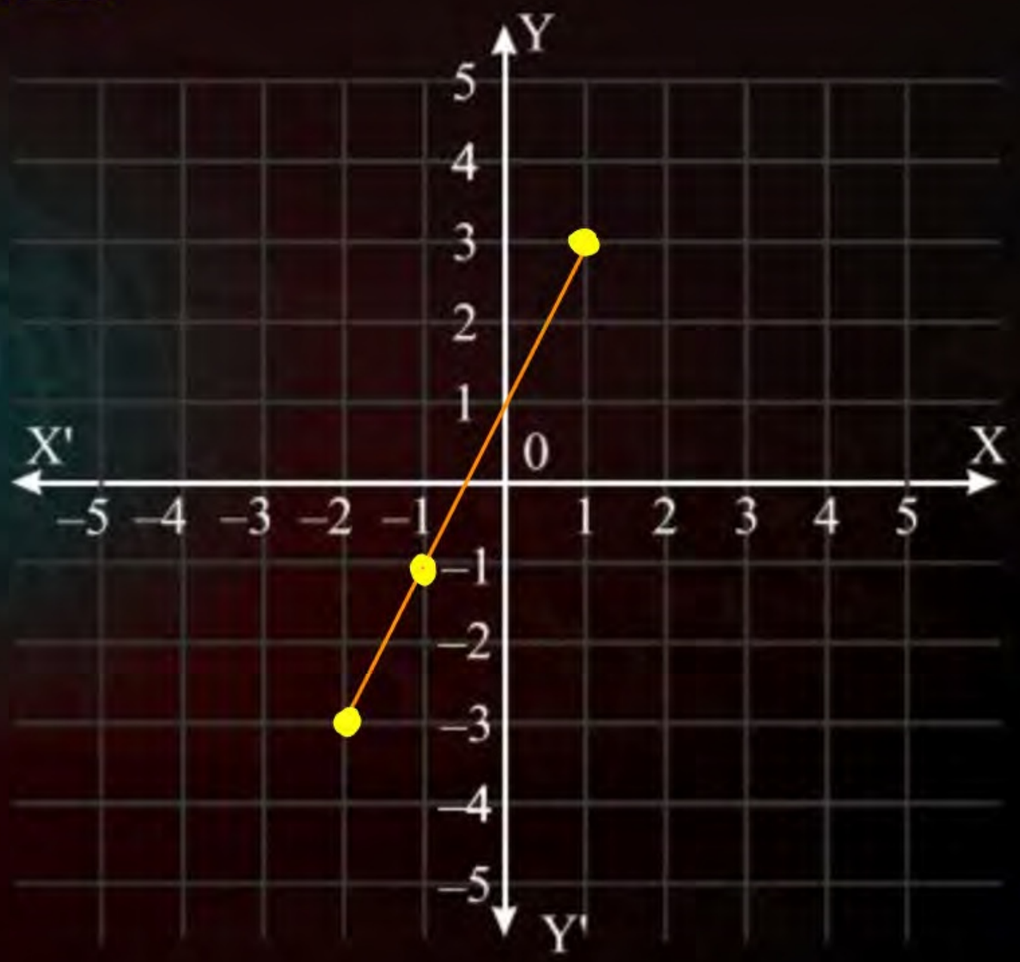
VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Plot the following points and check whether they are collinear or not: (1, 3), (−1, −1), (−2, −3).

→ yes





Question

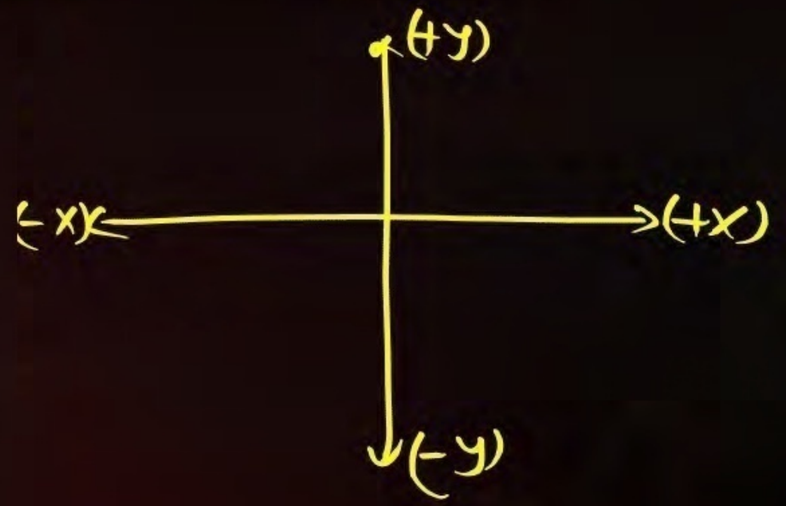
Without plotting the points indicate the quadrant in which they will lie, if

A The ordinate is 5 and abscissa is -3

B The abscissa is -5 and ordinate is -3

C The abscissa is -5 and ordinate is 3

D The ordinate is 5 and abscissa is 3



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Without plotting the points indicate the quadrant in which they will lie, if

A The ordinate is 5 and abscissa is -3 — $(-3, 5)$ II

B The abscissa is -5 and ordinate is -3 — $(-5, -3)$ III

C The abscissa is -5 and ordinate is 3 — $(-5, 3)$ II

D The ordinate is 5 and abscissa is 3 — $(3, 5)$ I

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

If in coordinates of a point B(3,−2), signs of both coordinates are interchanged, then it will lie in which quadrant?

First Quadrant

Second Quadrant

Third Quadrant

Fourth Quadrant

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

If in coordinates of a point B(3,−2), signs of both coordinates are interchanged, then it will lie in which quadrant?

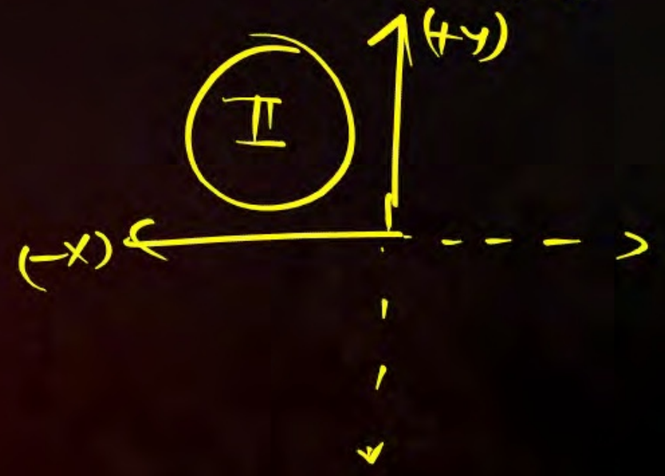
A. First Quadrant

B. Second Quadrant

C. Third Quadrant

D. Fourth Quadrant

$B(3,-2) \xrightarrow{\text{sign interchange}} B'(-3,2)$



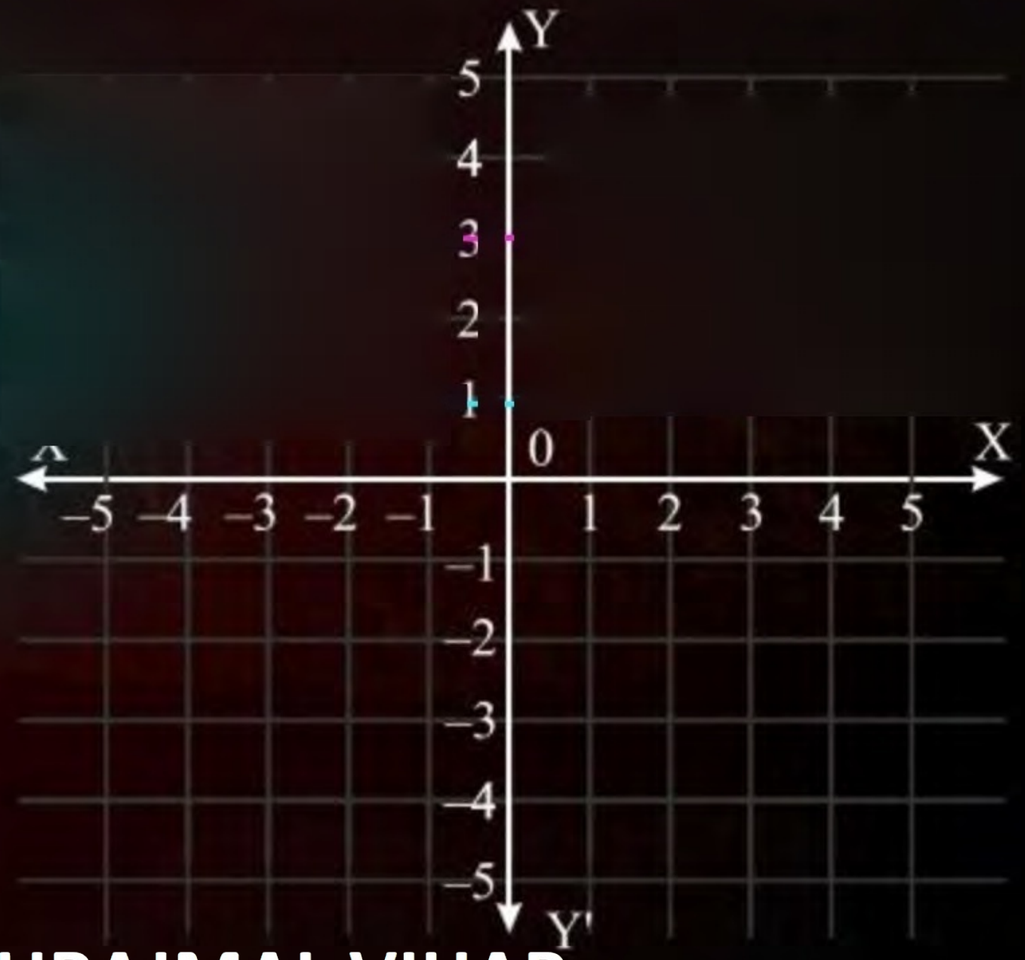
VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

One level up

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Three vertices of any rectangle ABCD are A(3, 1), B(–3, 1) and C(–3, 3). Plot these points on the graph paper and find the coordinates of the fourth vertex D. Also, find the area of rectangle ABCD.



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

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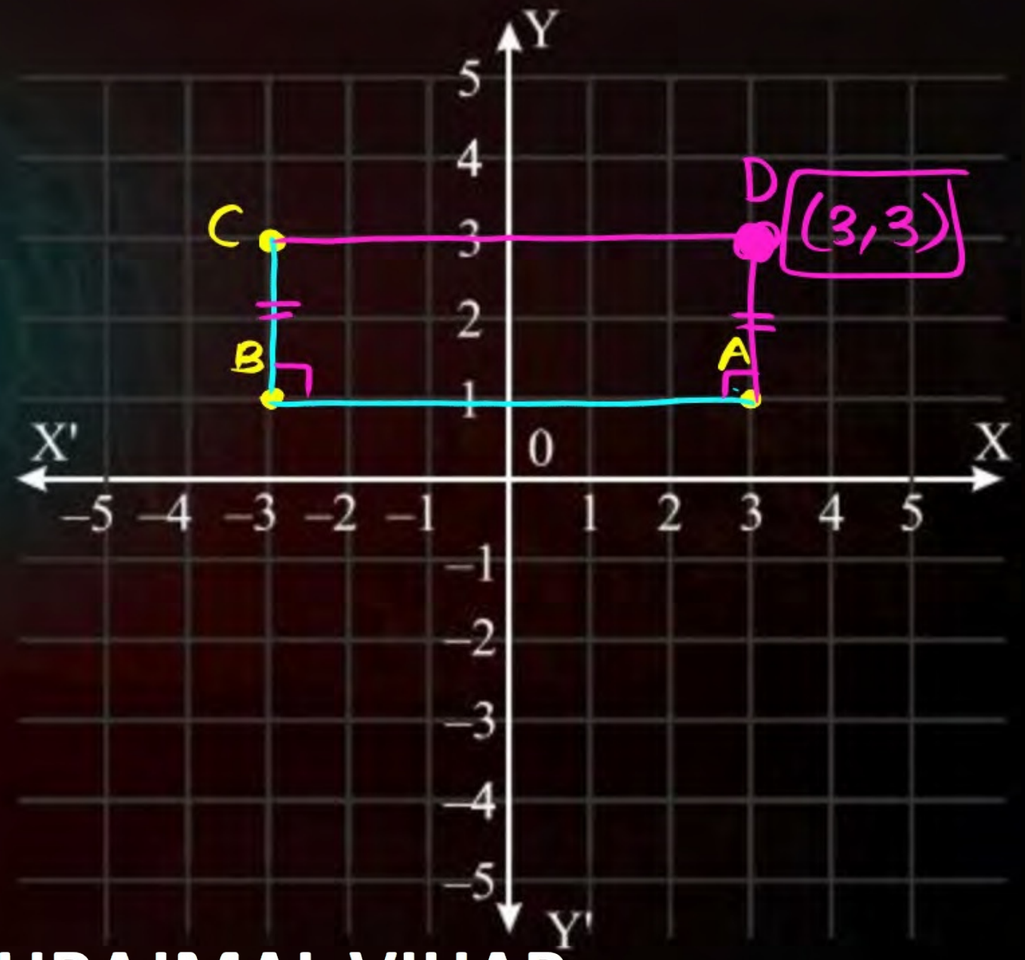
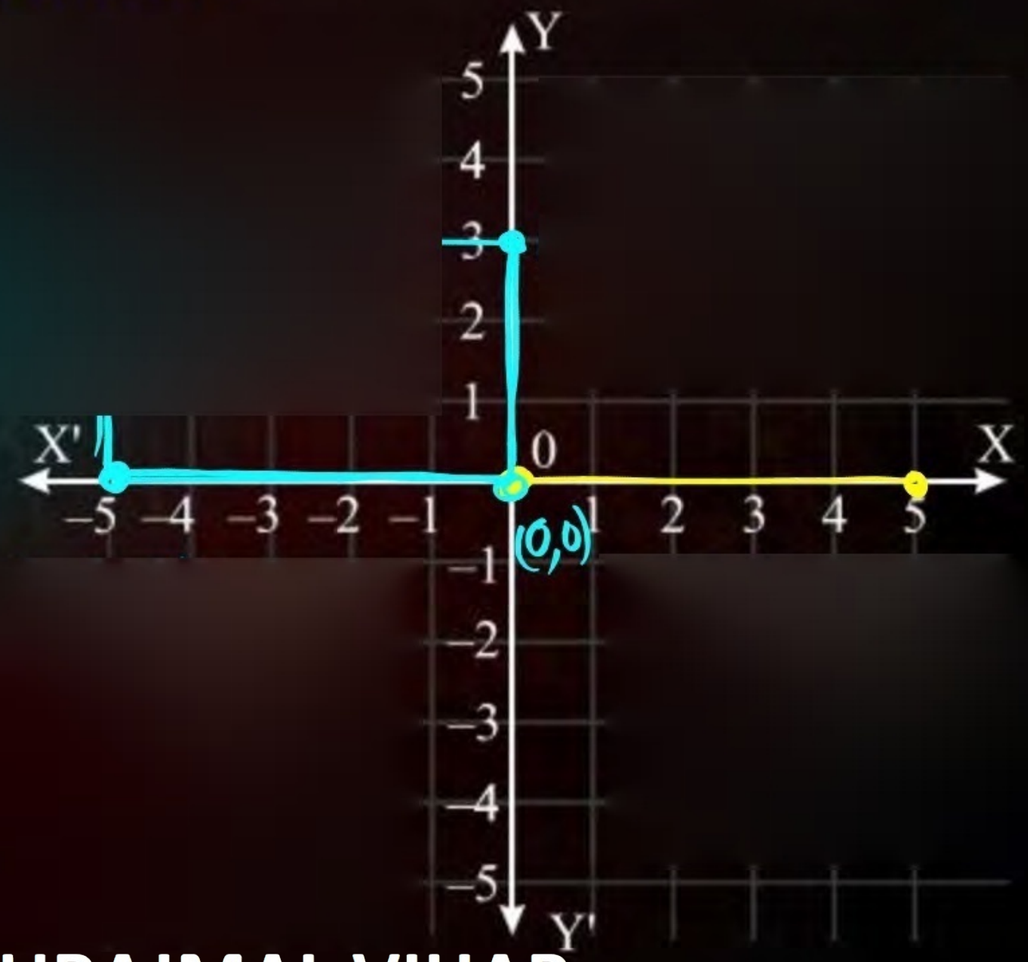


VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

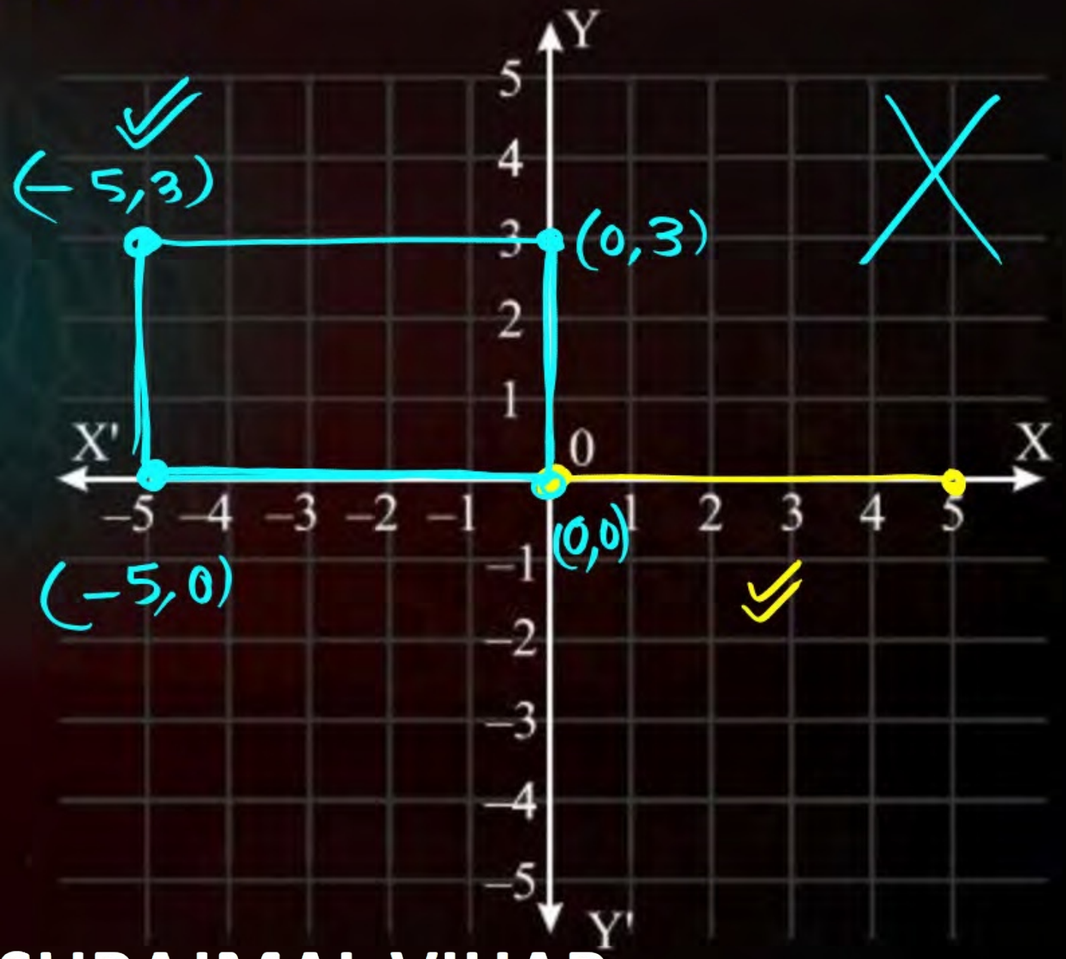
Write the coordinates of the vertices of a rectangle whose length and breadth are 5 and 3 units respectively, one vertex is at the origin, the longer side lies on the x-axis, and one of the vertices lies in the third quadrant.



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Write the coordinates of the vertices of a rectangle whose length and breadth are 5 and 3 units respectively, one vertex is at the origin, the longer side lies on the x-axis, and one of the vertices lies in the third quadrant.



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

In the given figure, ABCD is a rectangle with length 6 cm and breadth 3 cm. O is origin and mid-point of AB. Find the coordinates of A, B, C and D.

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

In the given figure, ABCD is a rectangle with length 6 cm and breadth 3 cm. O is origin and mid-point of AB. Find the coordinates of A, B, C and D.

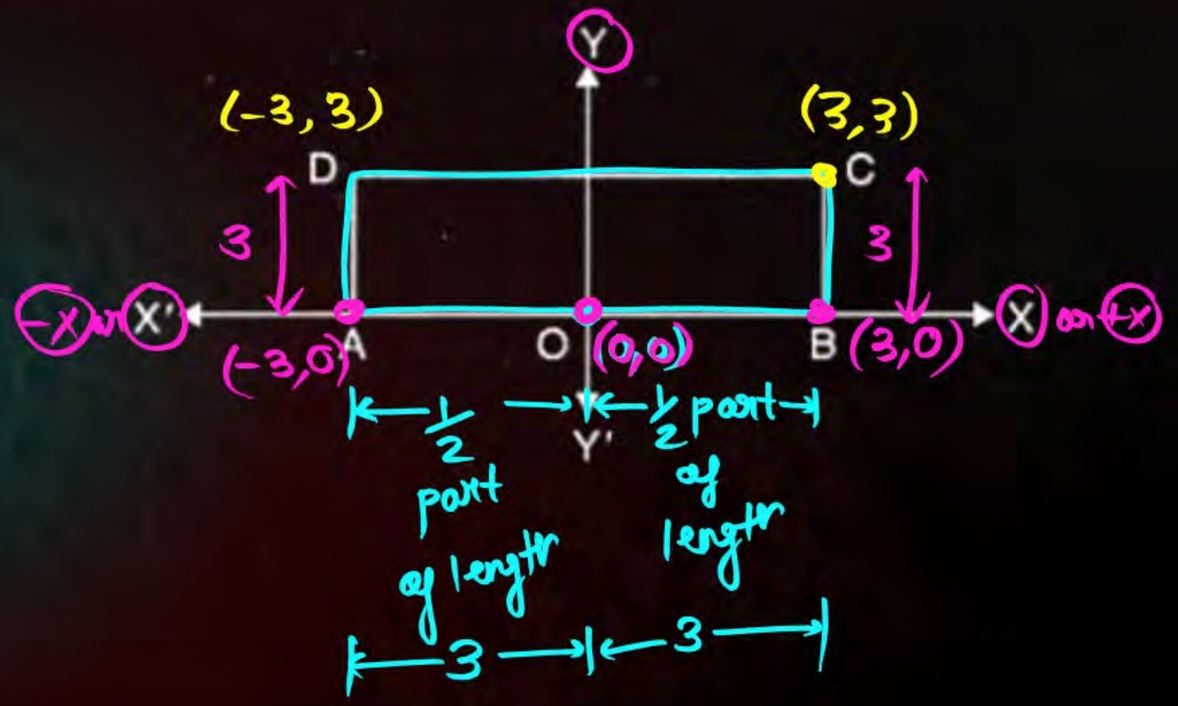
$A = (-3, 0)$

$B = (3, 0)$

$C = (3, 3)$

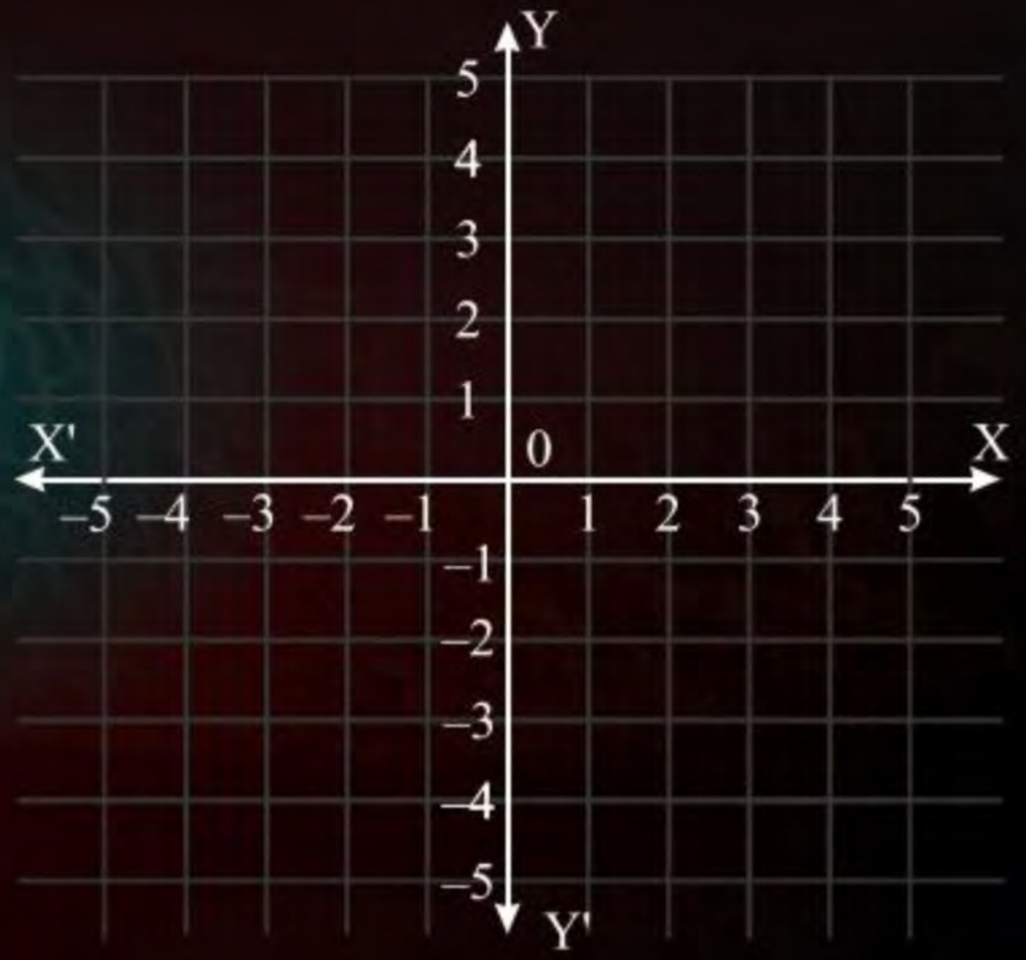
$D = (-3, 3)$

Ans.



Question

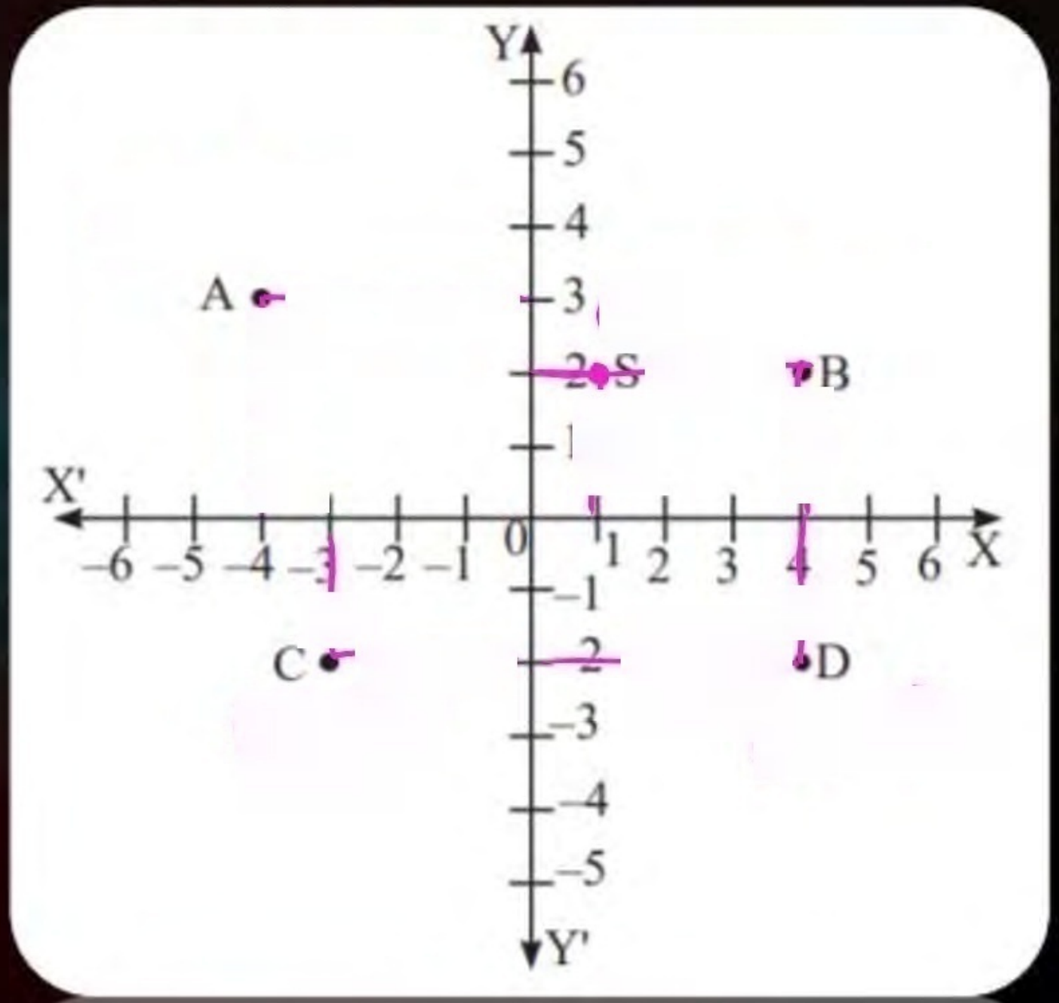
In which quadrant or on which axis do each of the points $(-2, 4), (3, -1), (-1, 0)(1, 2)$ and $(-3, -5)$ lie? Verify your answer by locating them on the Cartesian plane.



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

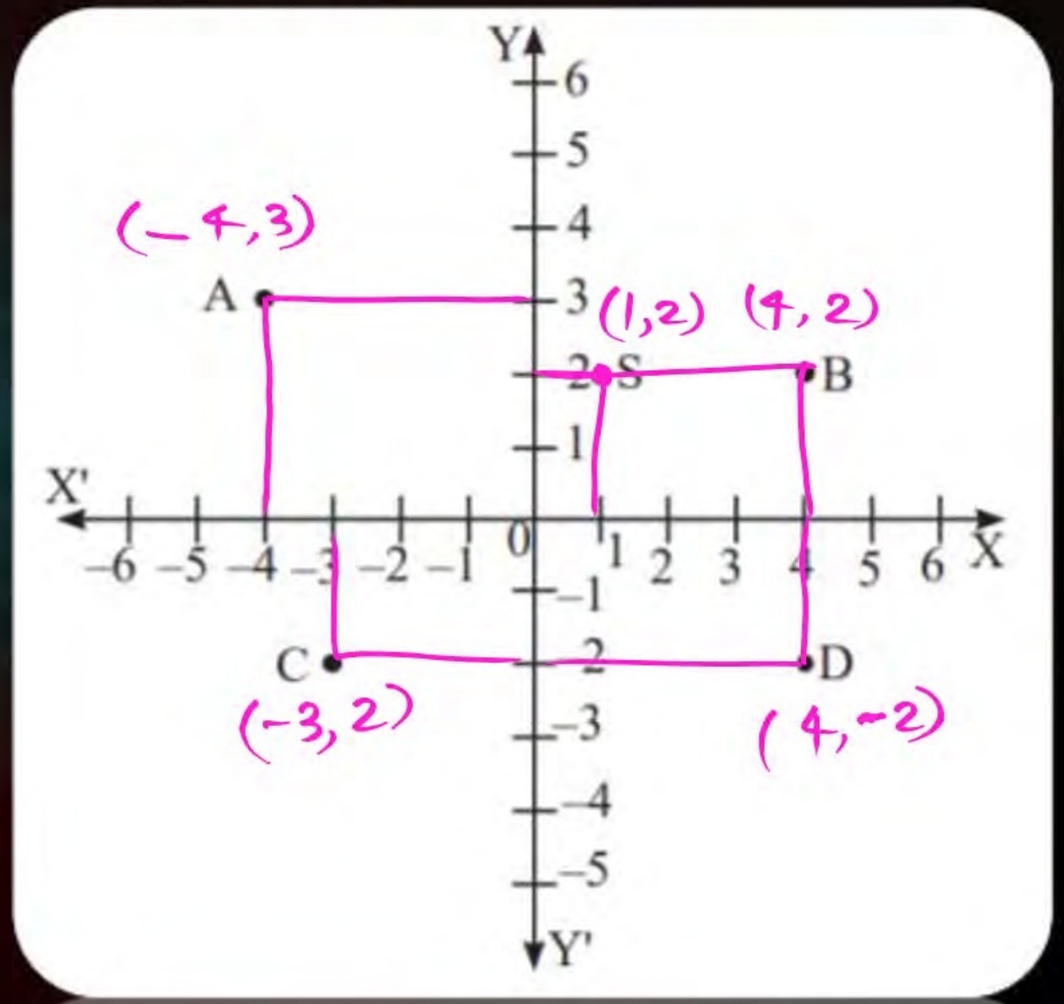
What are the coordinates of A, B, C, D and S in the following figure?



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

What are the coordinates of A, B, C, D and S in the following figure?



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

The point whose ordinate is 4 which lies on y-axis is

(4, 0)

(0, 4)

(1, 4)

(4, 2)

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

The point whose ordinate is 4 which lies on y-axis is

y- coordinate

x- ke dir^n me no movement

A (4, 0)

B (0, 4)

C (1, 4)

D (4, 2)

(0,4)

Question

A point is at a distance of 5 units from the x-axis and 3 units from the y-axis, then the coordinates of the point can be

(3,5)

$(-3,-5)$

$(-3,5)$

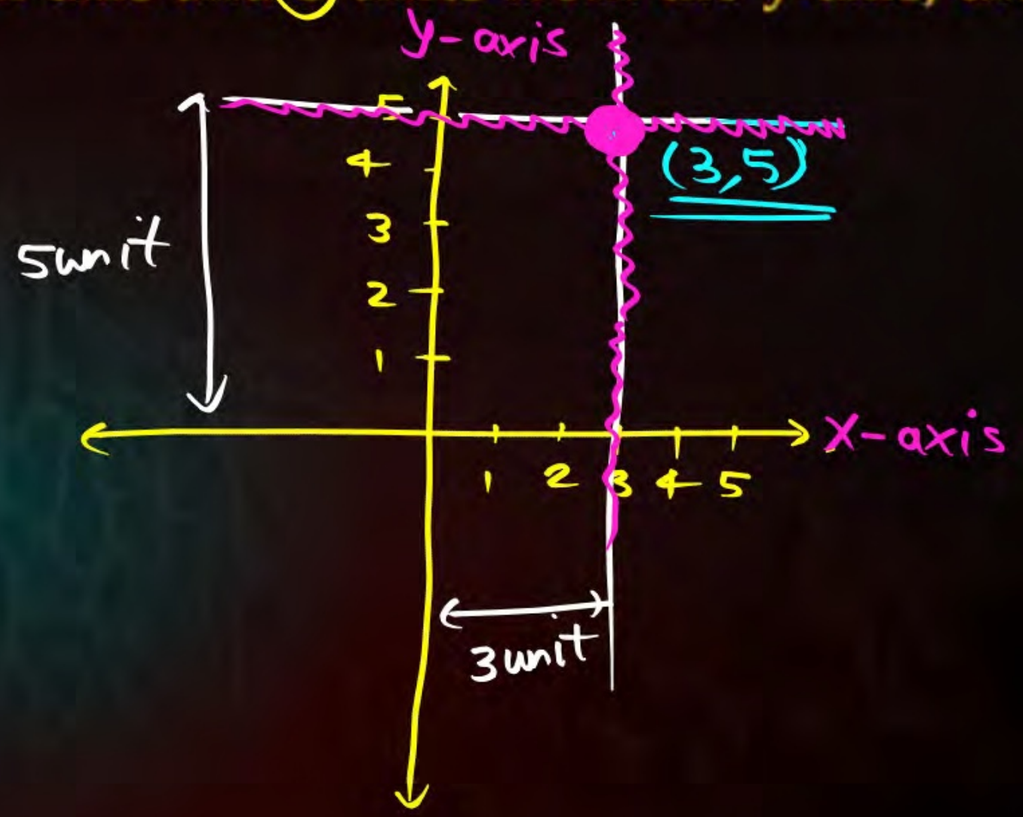
$(3,-5)$

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

A point is at a distance of 5 units from the x-axis and 3 units from the y-axis, then the coordinates of the point can be

- **A** (3,5)
- **B** $(-3,-5)$
- **C** $(-3,5)$
- **D** $(3,-5)$



Question

If in coordinates of a point B(3, −2), signs of both coordinates are interchanged, then it will lie in which quadrant?

A. First Quadrant

B. Second Quadrant

C. Third Quadrant

D. Fourth Quadrant

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

If in coordinates of a point B(3, −2), signs of both coordinates are interchanged, then it will lie in which quadrant?

A. First Quadrant

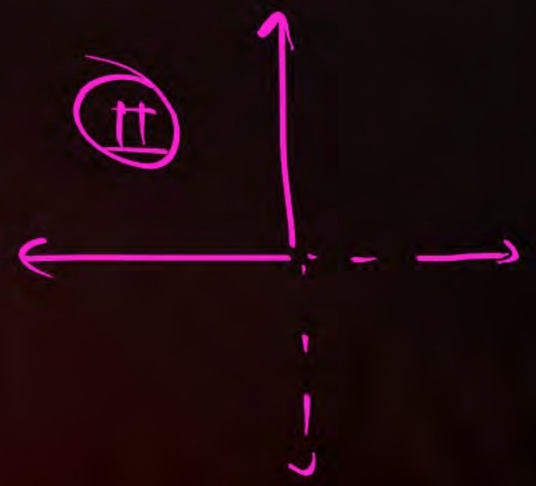
B. Second Quadrant

C. Third Quadrant

D. Fourth Quadrant

$B'(-3, 2)$

$(\ominus, \oplus)$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Write the answer of each of the following questions:

(i) What is the name of horizontal and the vertical lines drawn to determine the position of any point in the Cartesian plane?

(ii) What is the name of each part of the plane formed by these two lines.

(iii) Write the name of the point where these two lines intersect.

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

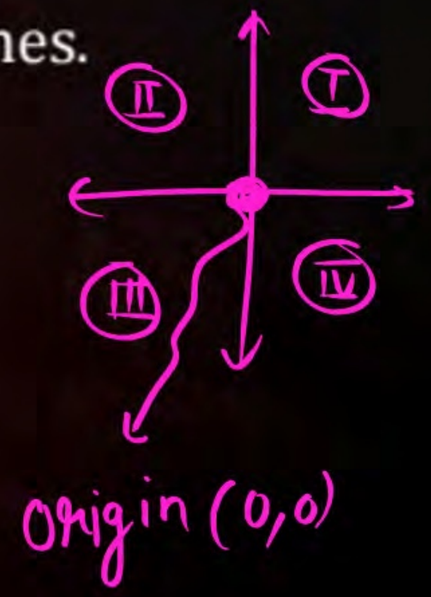
Question

Write the answer of each of the following questions:

(i) What is the name of horizontal (X-axis) and the vertical lines (y-axis) drawn to determine the position of any point in the Cartesian plane?

(ii) What is the name of each part of the plane formed by these two lines. (Quadrant)

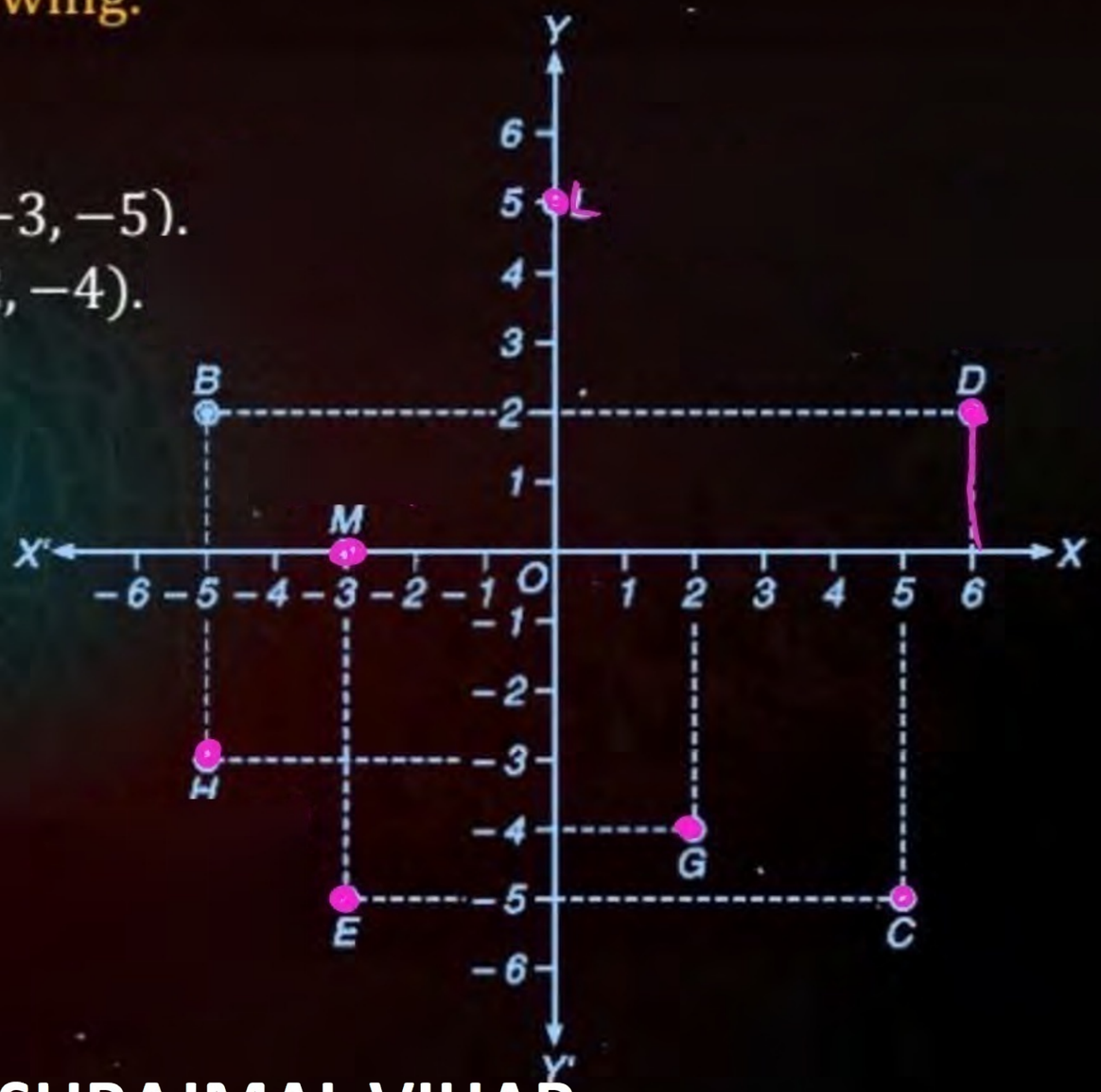
(iii) Write the name of the point where these two lines intersect. (origin)



Question

See the figure given below, and write the following:

1. The coordinates of B.
2. The coordinates of C.
3. The point identified by the coordinates $(-3, -5)$.
4. The point identified by the coordinates $(2, -4)$.
5. The abscissa of the point D.
6. The ordinate of the point H.
7. The coordinates of the point L.
8. The coordinates of the point M.

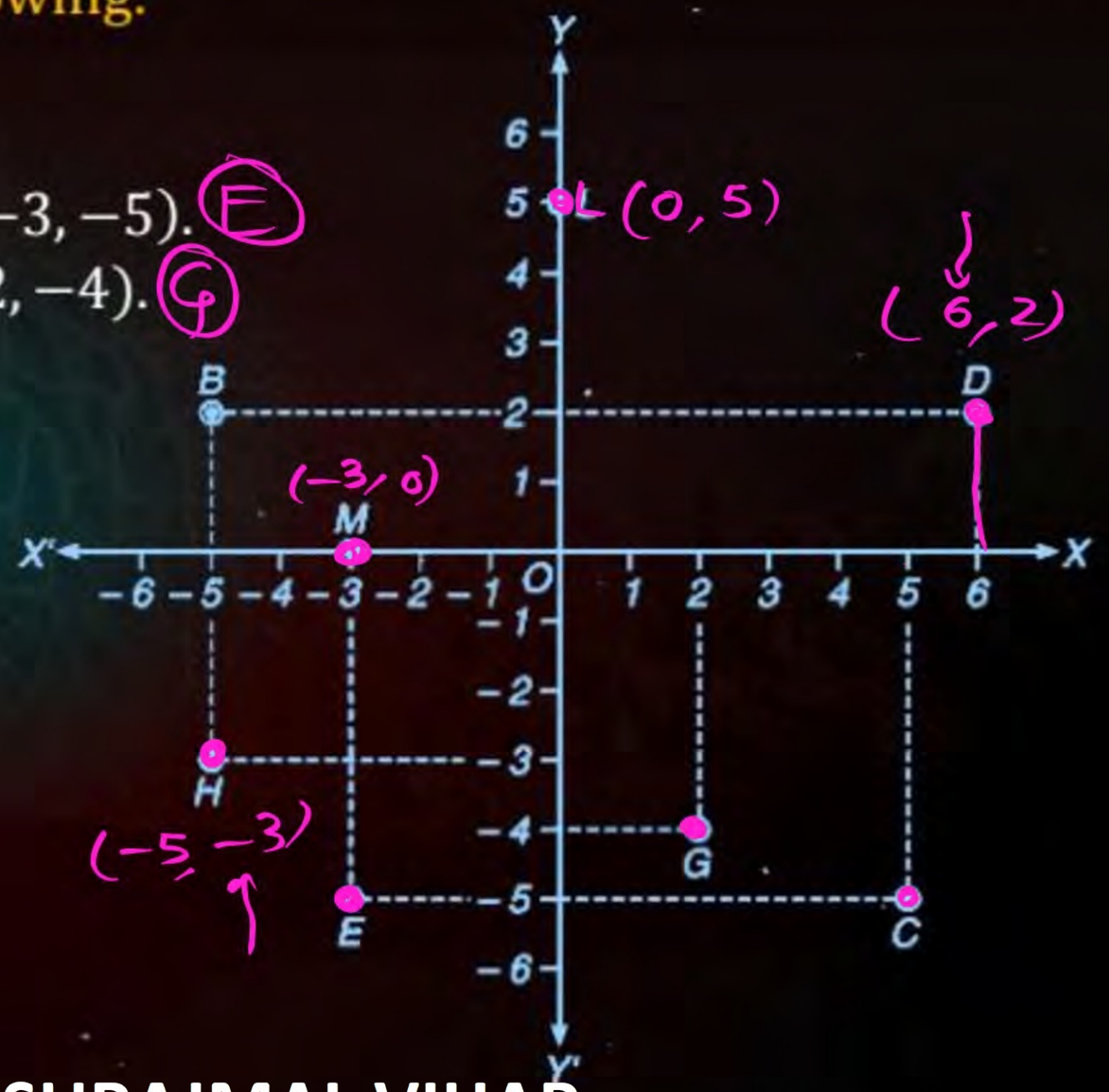


VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

See the figure given below, and write the following:

1. The coordinates of B. (−5, 2)
2. The coordinates of C. (5, −5)
3. The point identified by the coordinates $(-3, -5)$. E
4. The point identified by the coordinates $(2, -4)$. G
5. The abscissa of the point D. $\boxed{6}$
6. The ordinate of the point H. $\boxed{-3}$
7. The coordinates of the point L. (0, 5)
8. The coordinates of the point M. (−3, 0)



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Write the names of quadrant in which the following coordinates point lies, where x and y are natural numbers $(-x, y), (x, y), (-x, -y)$

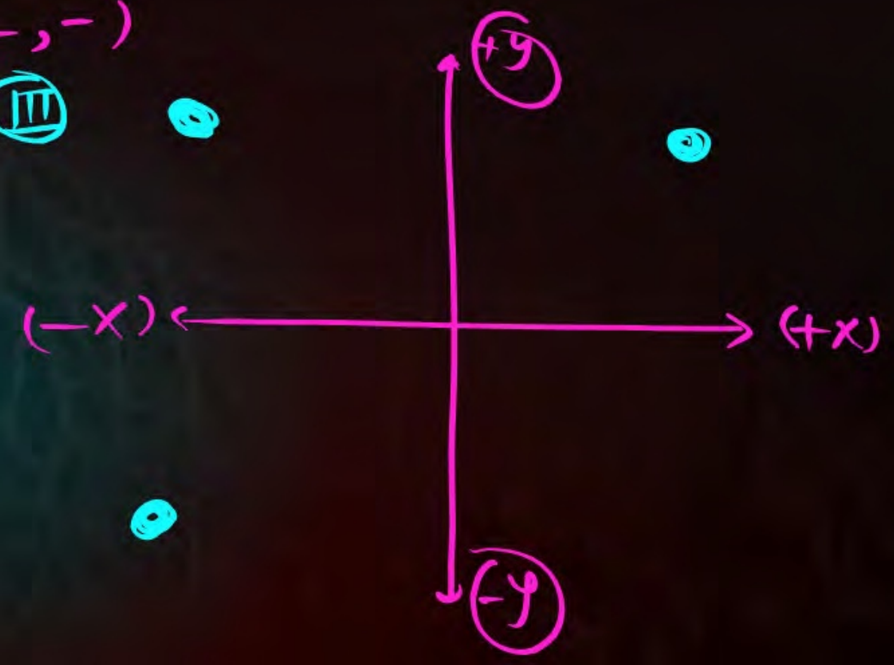
VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Write the names of quadrant in which the following coordinates point lies, where x and y are natural numbers $(-x, y), (x, y), (-x, -y)$

$x \rightarrow +ve$ $\quad y \rightarrow +ve$

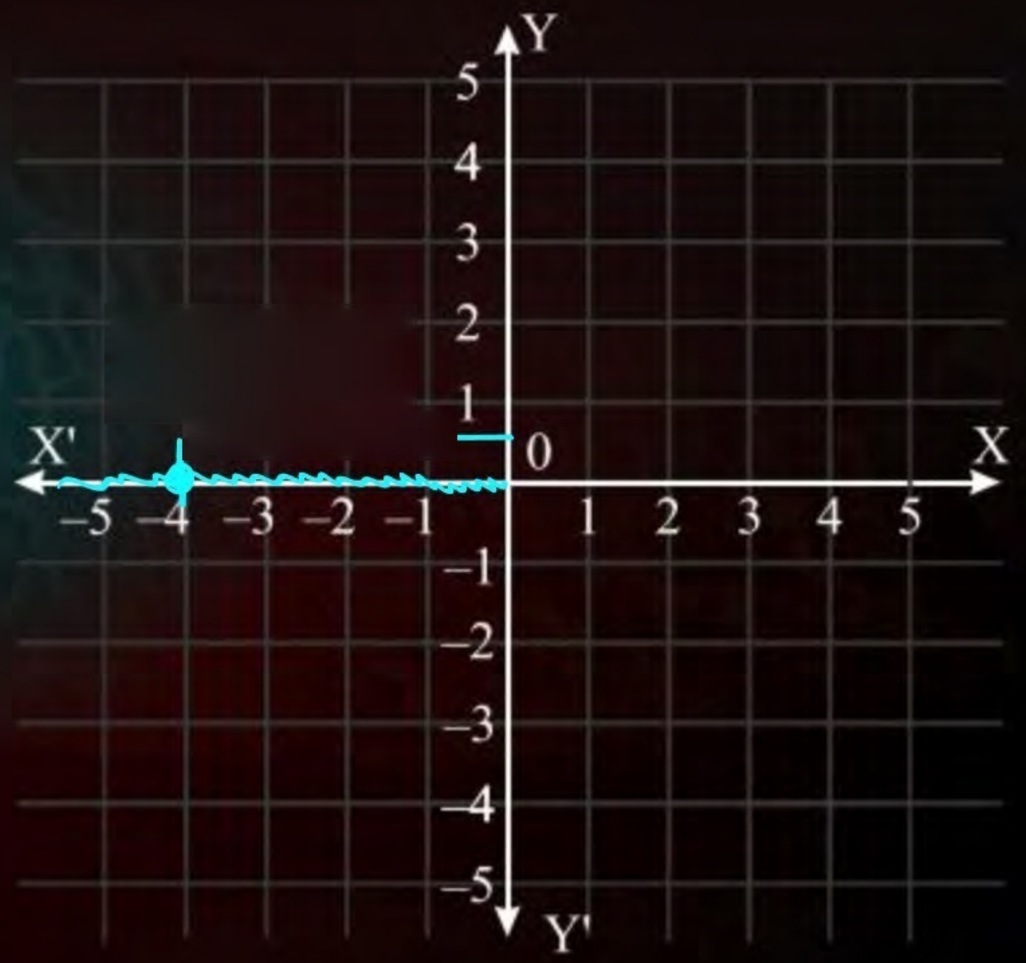
$(-,+)$ II $\quad (+,+)$ I $\quad (-,-)$ III



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

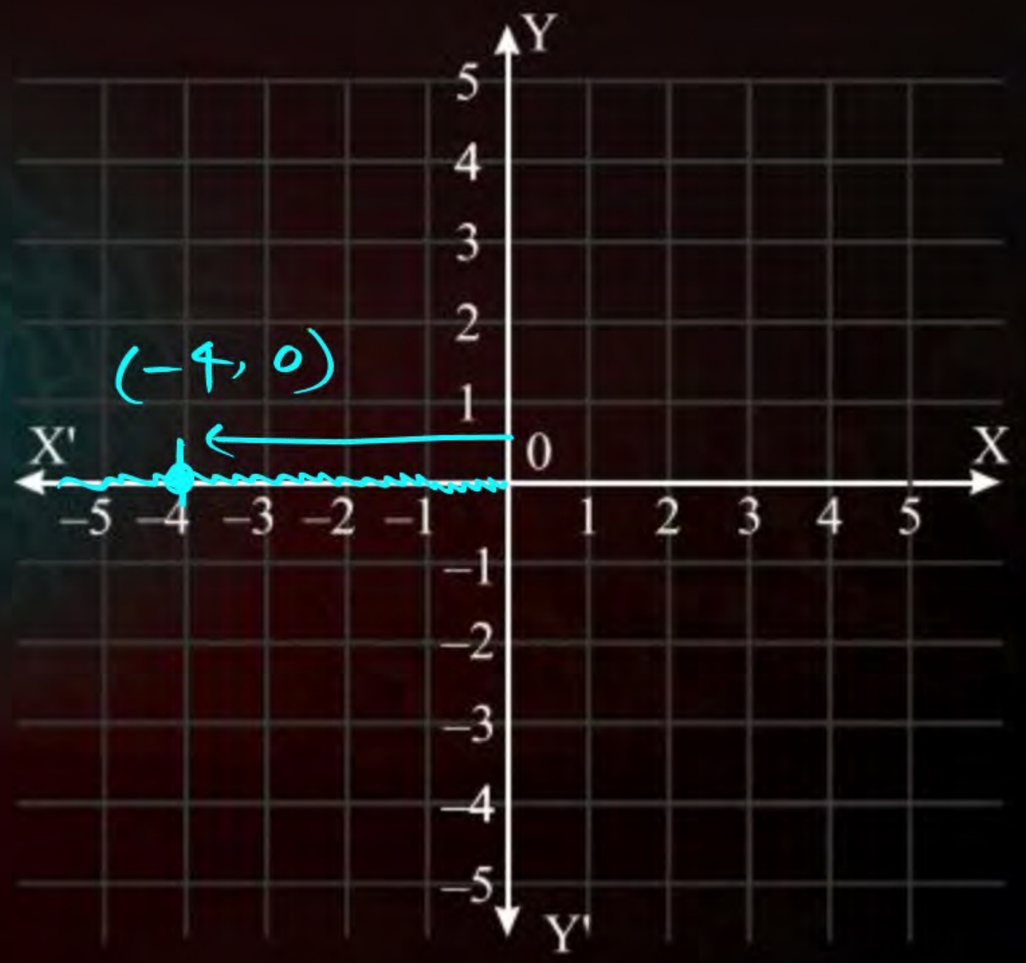
A point lies on negative side of x-axis. Its distance from origin is 4 units. The coordinates of the point are



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

A point lies on negative side of x-axis. Its distance from origin is 4 units. The coordinates of the point are → (−4, 0)



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Assertion and Reason Type Problem

DIRECTION: In the following questions, a statement of assertion (A) is followed by a statement of reason (R).

Mark the correct choice as:

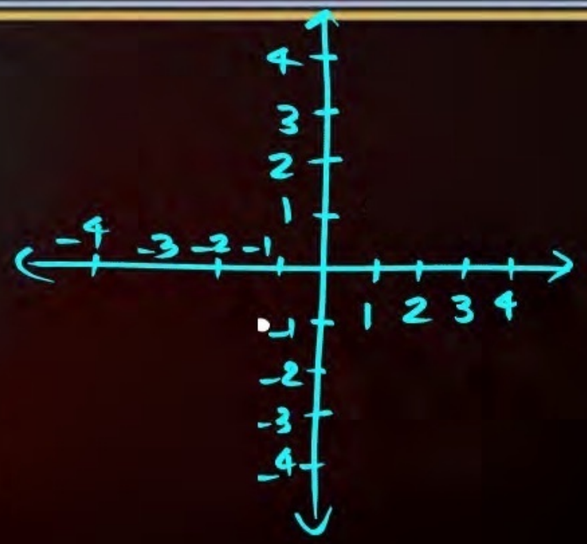
a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
c) Assertion (A) is true but reason (R) is false.
d) Assertion (A) is false but reason (R) is true.

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Assertion and Reason Type Problem

Assertion: If the ordinate of a point is equal to its abscissa, then the point lies either in the first quadrant or in the second quadrant. → False

Reason: A point whose both abscissa and ordinate are negative will lie in the third quadrant. → True



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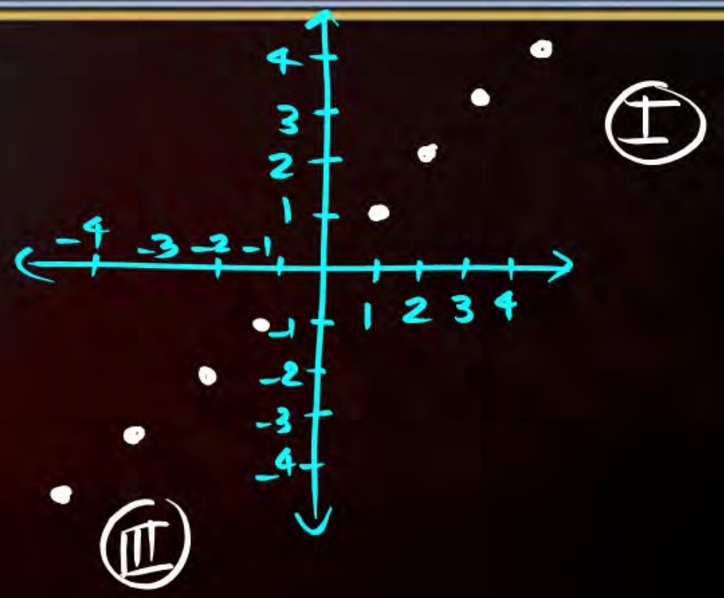
$(-x, -y)$

$x = y$

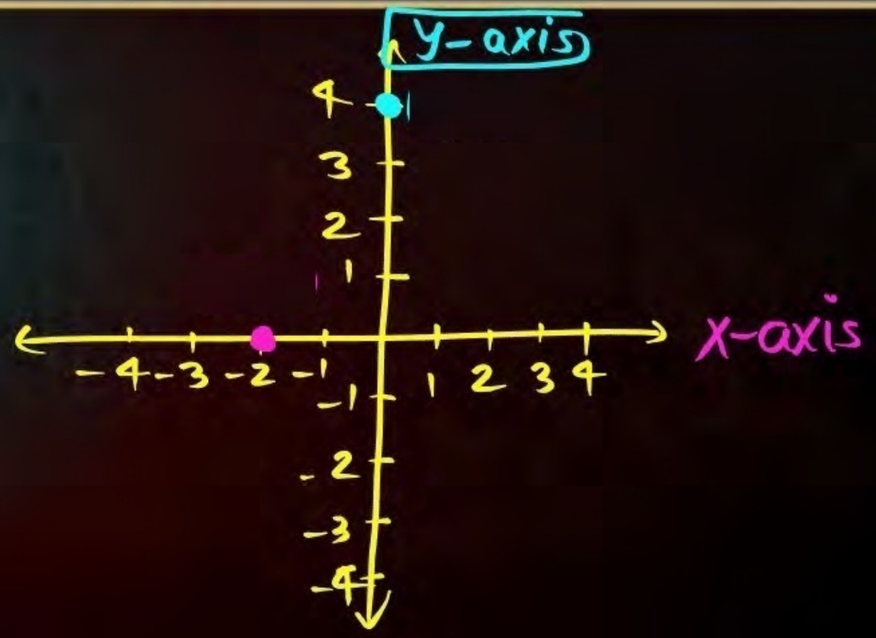


Final Answer: option (d)

Assertion and Reason Type Problem

Assertion: The point $(-2, 0)$ lies on y-axis and $(0, 4)$ on x -axis.

Reason: Every point on the x −axis has zero distance from x −axis and every point on the y-axis has zero distance from y-axis.



Assertion and Reason Type Problem

Assertion: The point $(-2, 0)$ lies on y-axis and $(0, 4)$ on x -axis. → False

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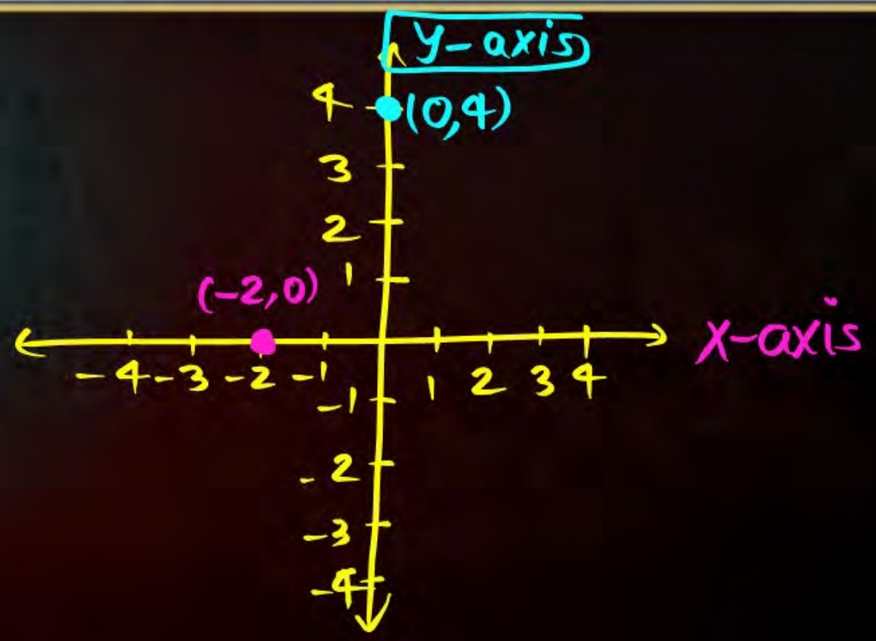
Final Answer: option (d)



Assertion and Reason Type Problem

Assertion: A point whose abscissa is -3 and ordinate is 2 lies in second quadrant.

Reason: Points of the type (–, +) lie in the second quadrant.

Assertion and Reason Type Problem

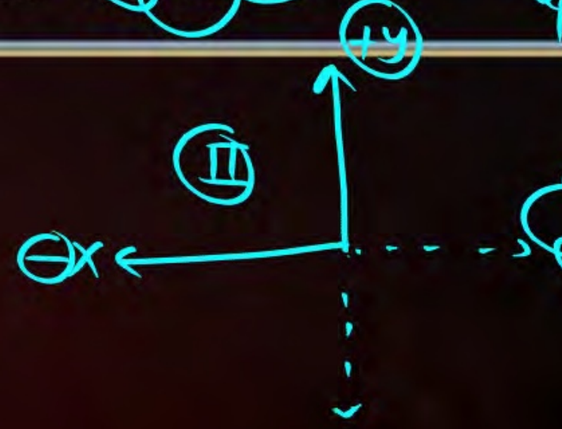
Assertion: A point whose abscissa is -3 and ordinate is 2 lies in second quadrant. → True

(−3, 2)

Reason: Points of the type (–, +) lie in the second quadrant. → True

apply

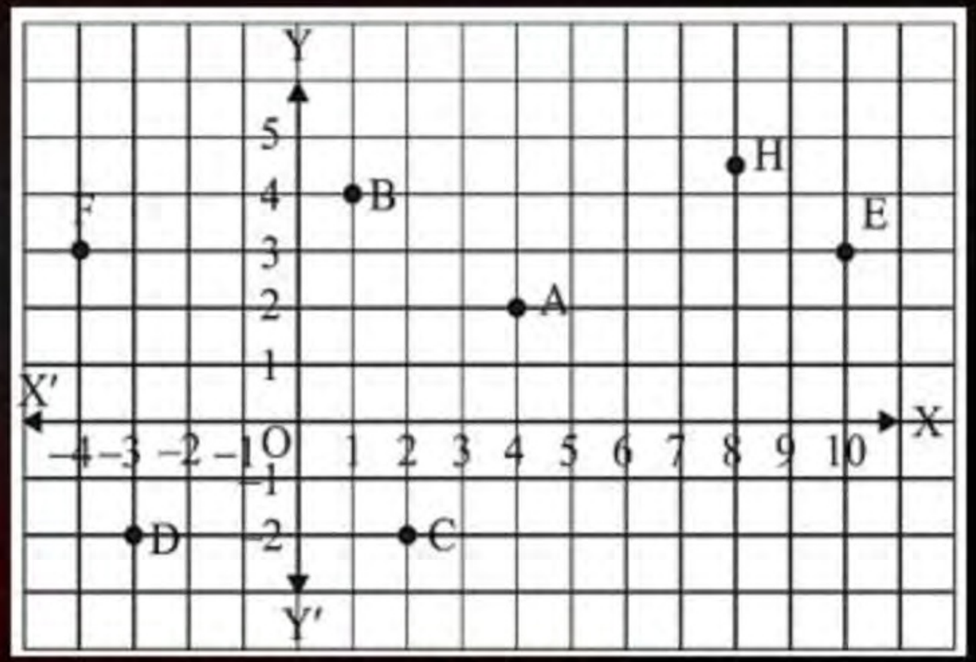
Explain



Final answer : option (a)

Cased-Based Type Questions

Cased-Based: Students of class IX are on visit of Sansad Bhawan. Teacher assign them the activity to observe and take some pictures to analyze the seating arrangement between various MP and speaker based on coordinate geometry. The staff tour guide explained various facts related to math's of Sansad Bhawan to the students, students were surprised when teacher ask them to apply coordinate geometry on the seating arrangement of MP's and speaker. Refer to the below image and graph. Answer the following question:



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

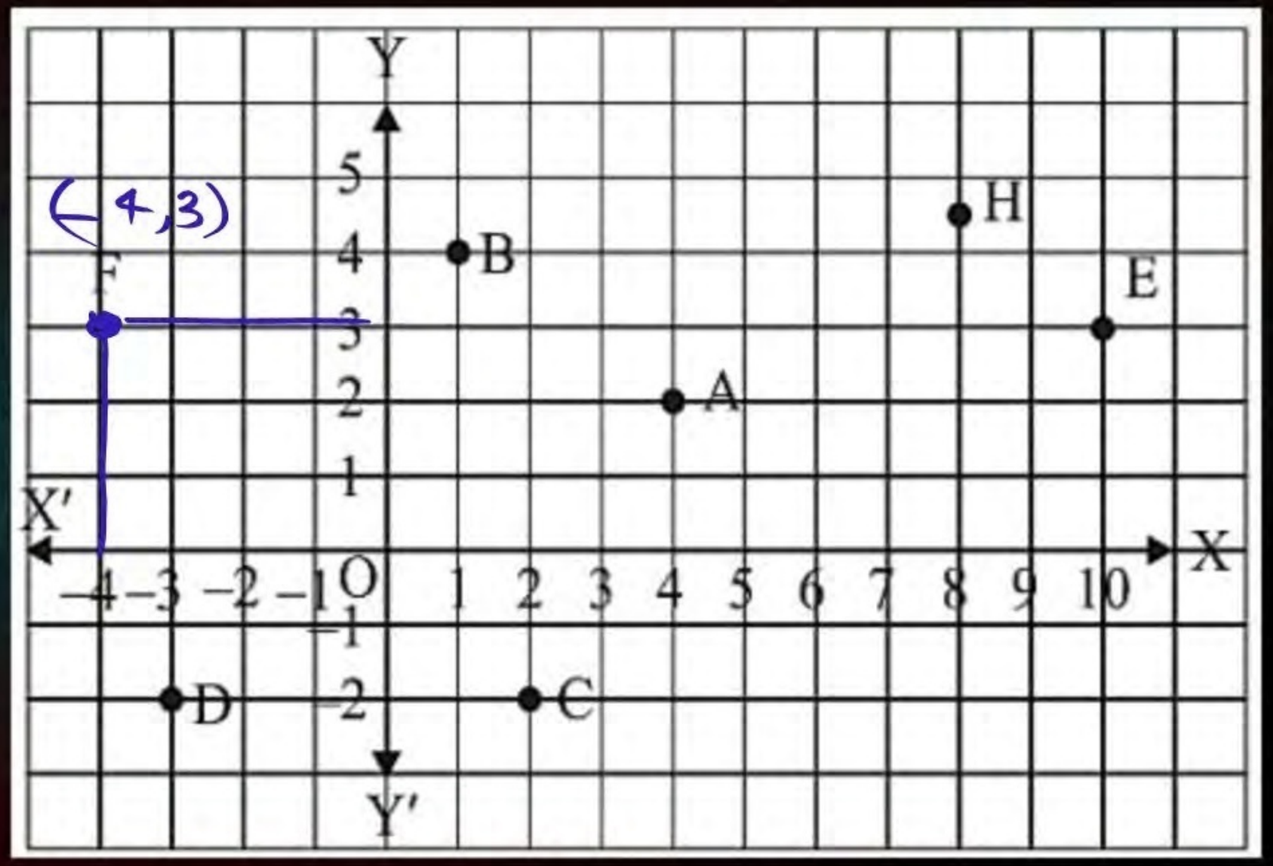
What are the coordinates of position 'F'?

$(-3, 4)$

$(4, 3)$

$(3, 4)$

$(-4, 3)$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

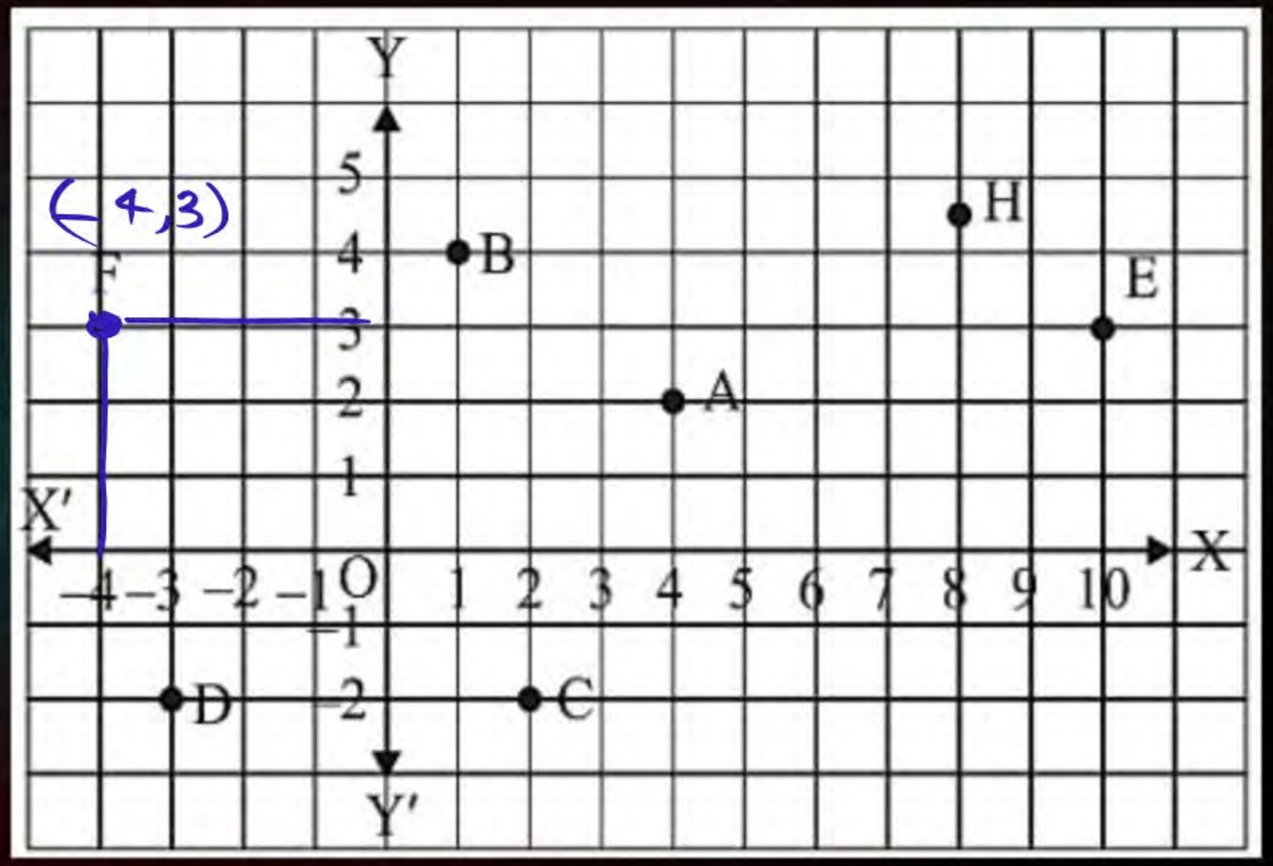
What are the coordinates of position 'F'?

A $(-3, 4)$

B $(4, 3)$

C $(3, 4)$

D $(-4, 3)$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

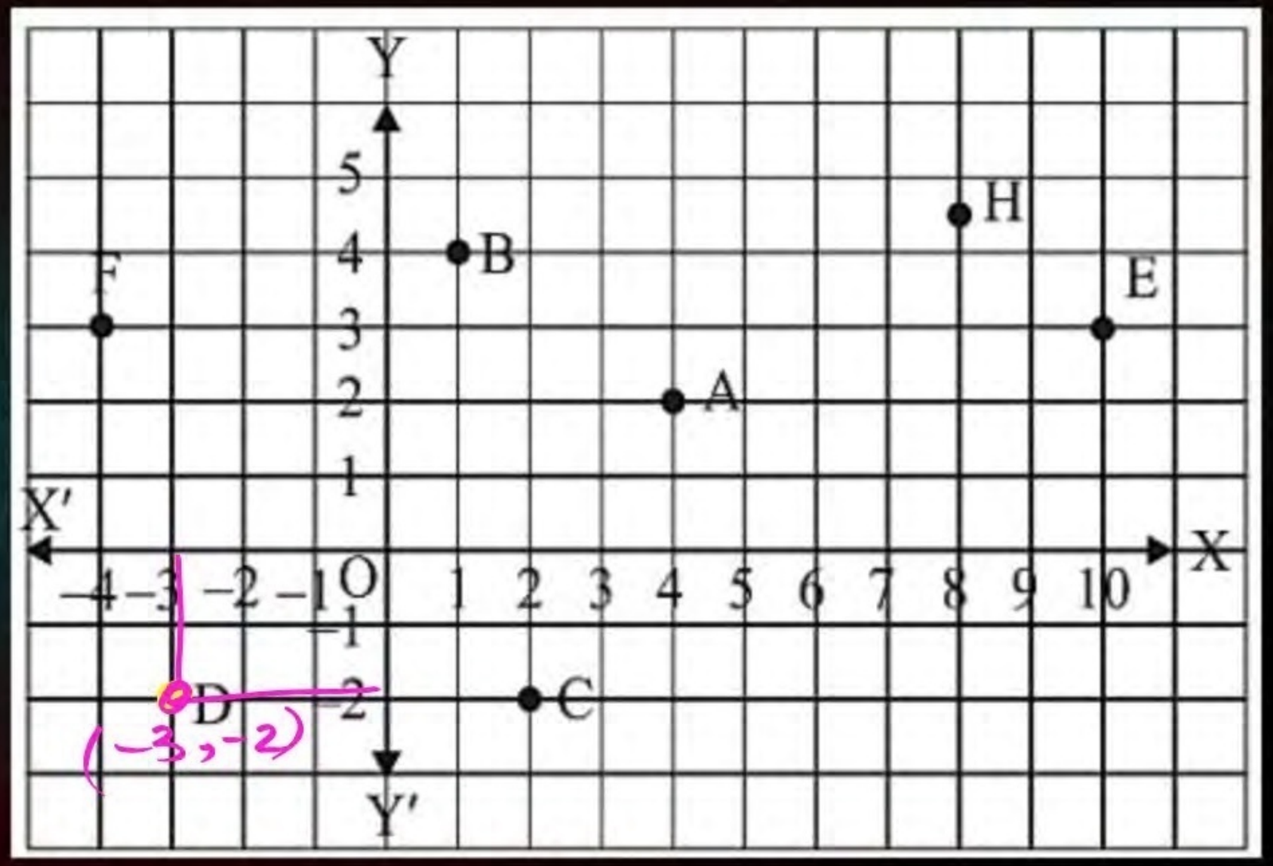
What are the coordinates of position 'D' ?

(3, −2)

(−3, −2)

(−3, 2)

(3, 2)



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

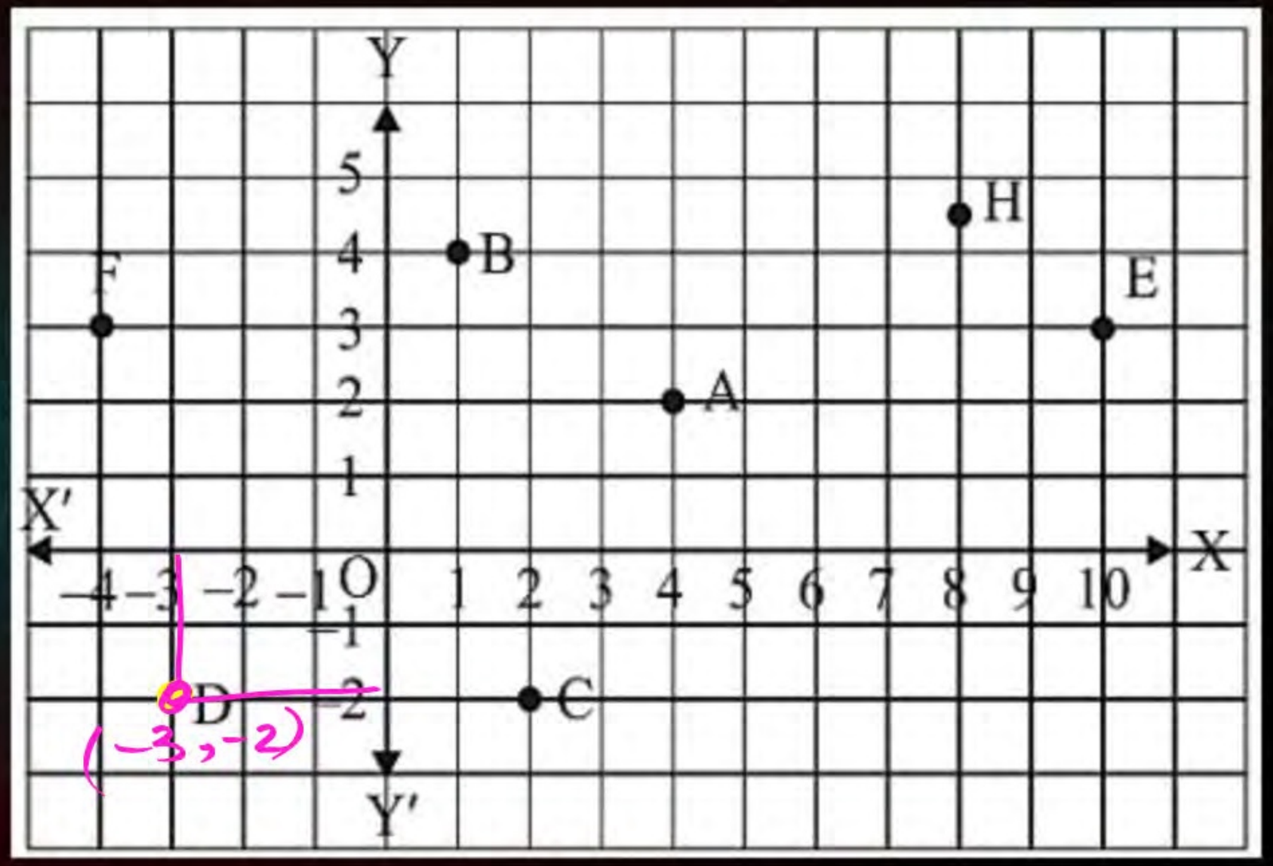
What are the coordinates of position 'D' ?

A. $(3, -2)$

B. $(-3, -2)$

C. $(-3, 2)$

D. $(3, 2)$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

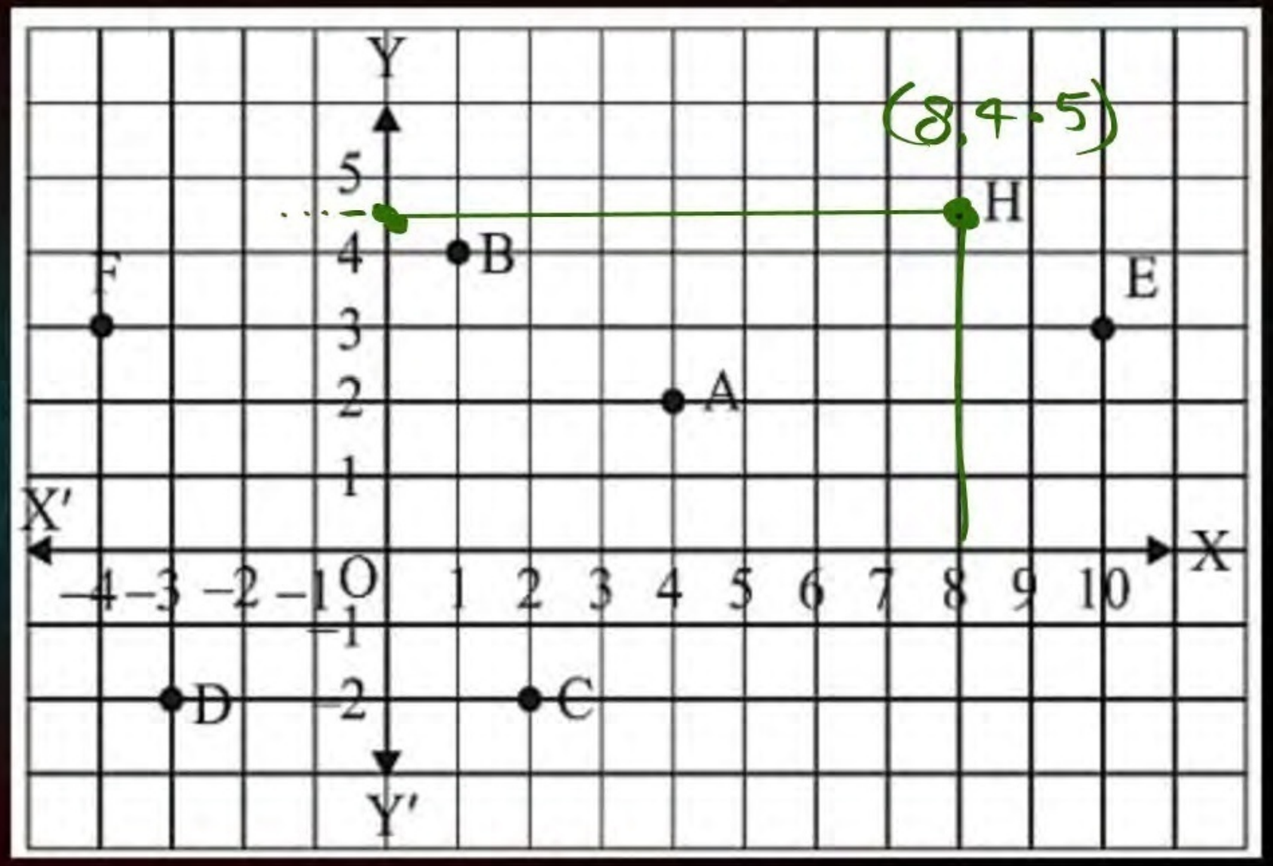
What are the coordinates of position H'?

(8, 5)

(8, 4.5)

(8, 4)

(8, 5.5)



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

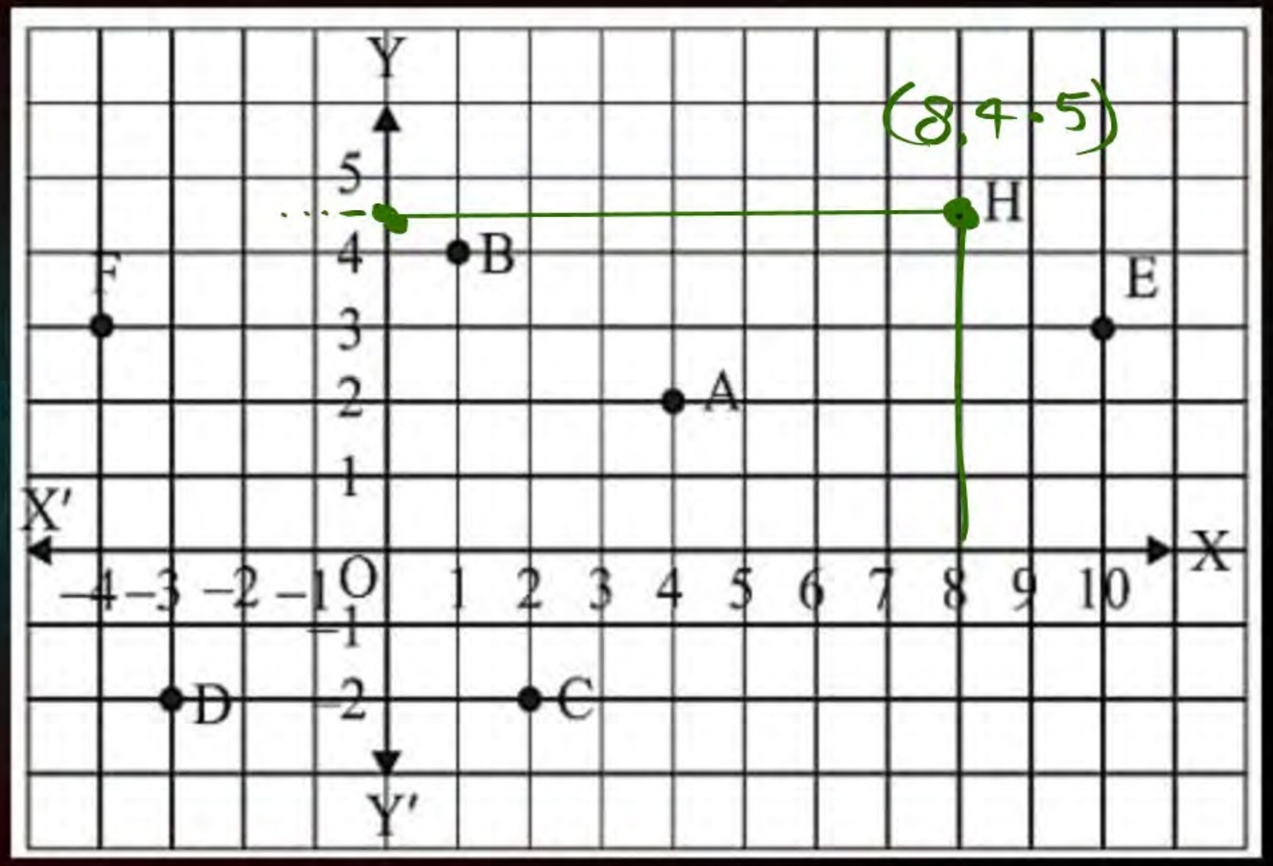
What are the coordinates of position H'?

A (8, 5)

B (8, 4.5)

C (8, 4)

D (8, 5.5)



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

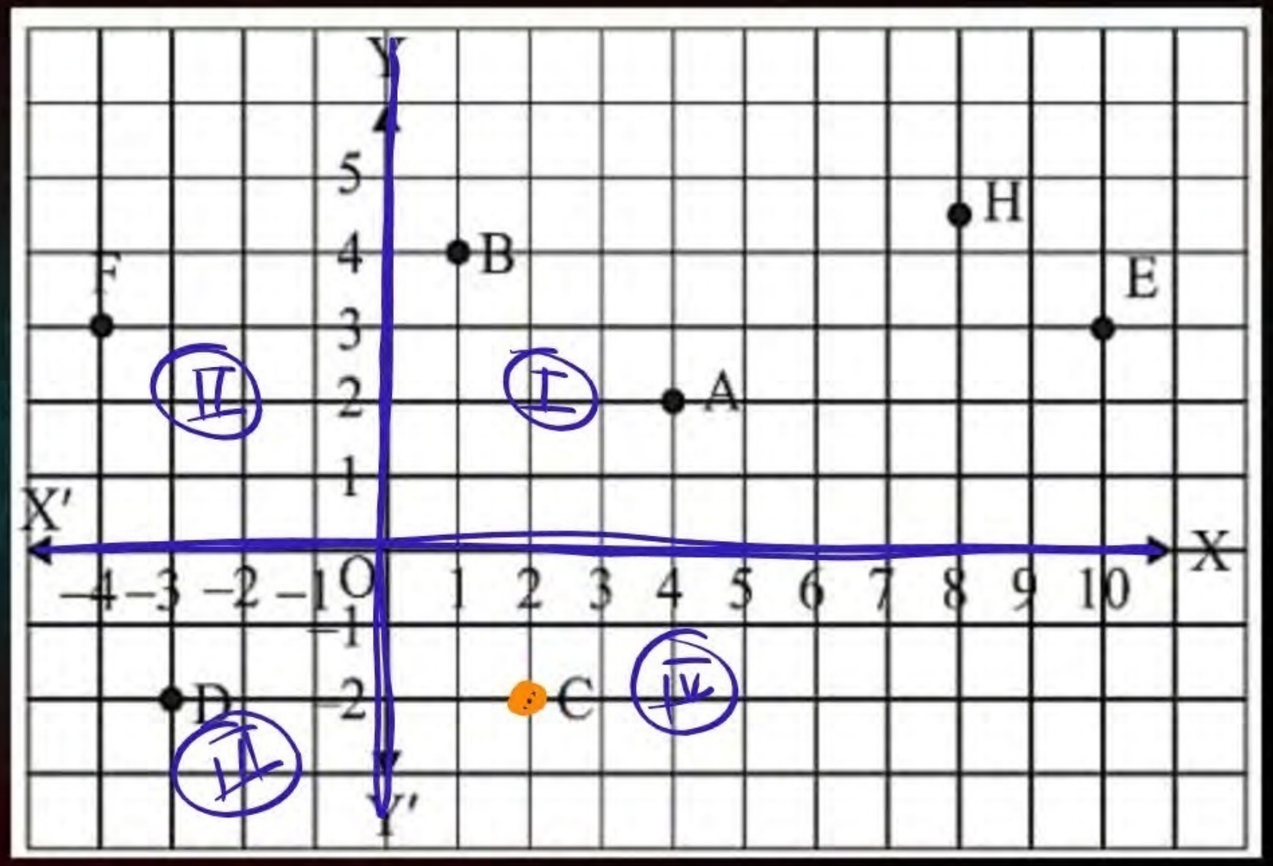
In which quadrant, the point 'C' lie?

I Quadrant

II Quadrant

III Quadrant

IV Quadrant

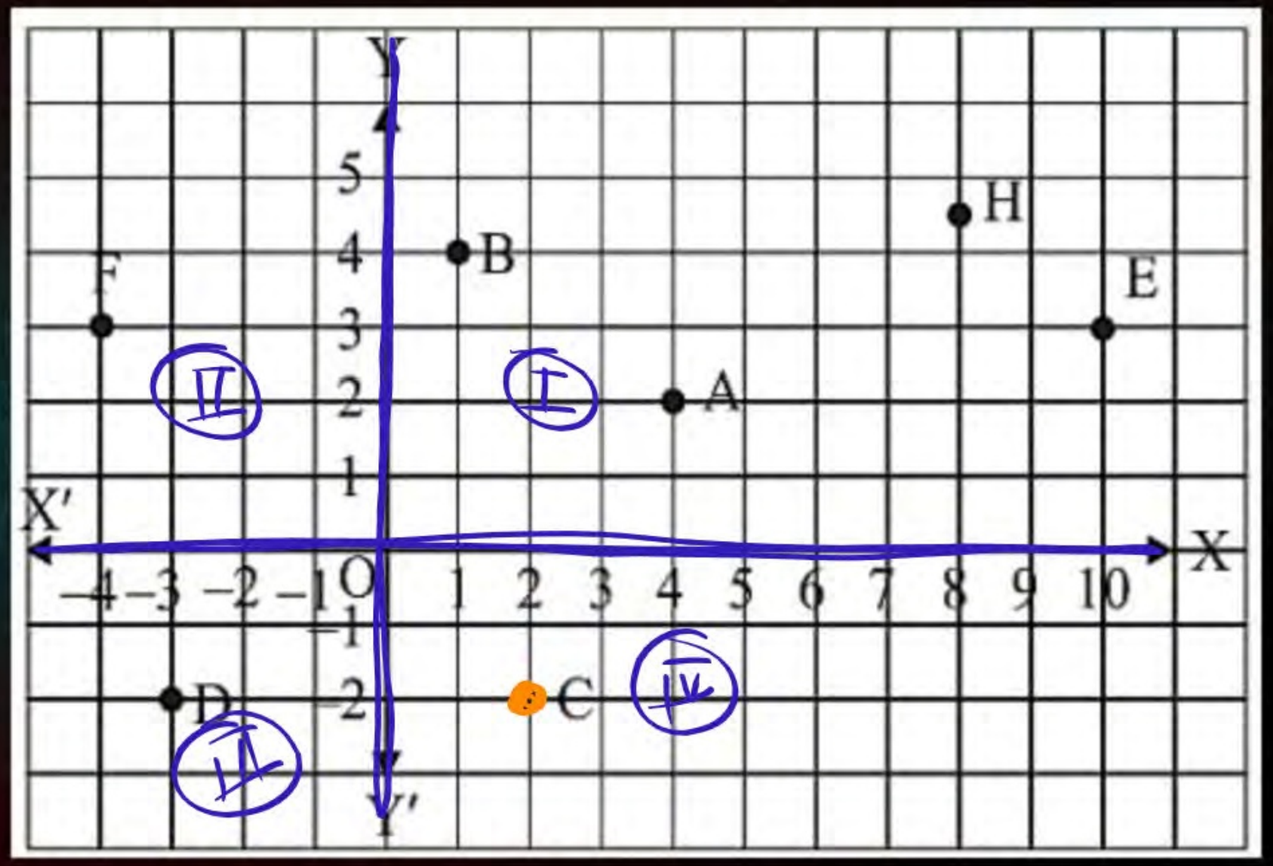


VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

In which quadrant, the point 'C' lie?

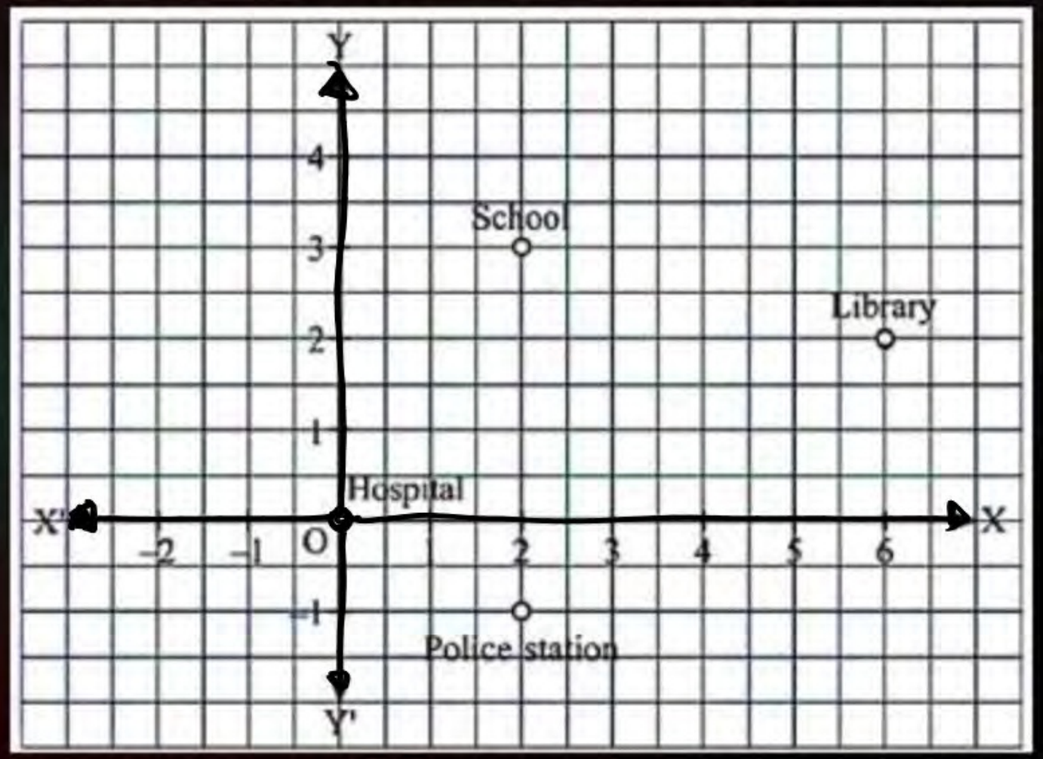
- **A** *I* Quadrant
- **B** *II* Quadrant
- **C** *III* Quadrant
- **D** *IV* Quadrant



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Cased-Based Type Questions

Cased-Based: Aditya is a Class IX student residing in a village. One day, he went to a city Hospital along with his grandfather for general checkup. From there he visited three places - School, Library and Police Station. After returning to his village, he plotted a graph by taking Hospital as origin and marked three places on the graph as per his direction of movement and distance. The graph is shown below:



Question

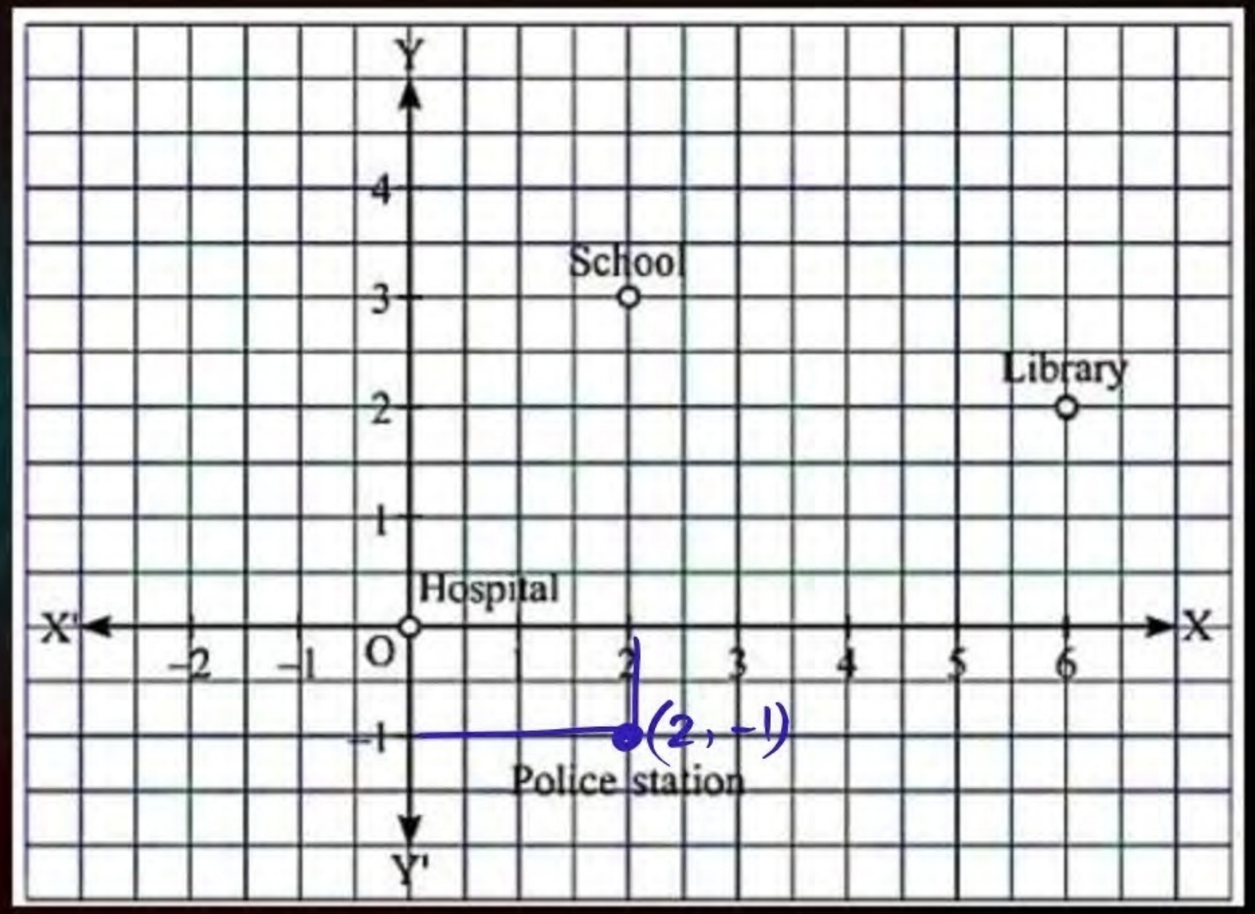
What are the coordinates of Police Station?

$(2, -1)$

$(2, 1)$

$(-2, -1)$

$(-2, 1)$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

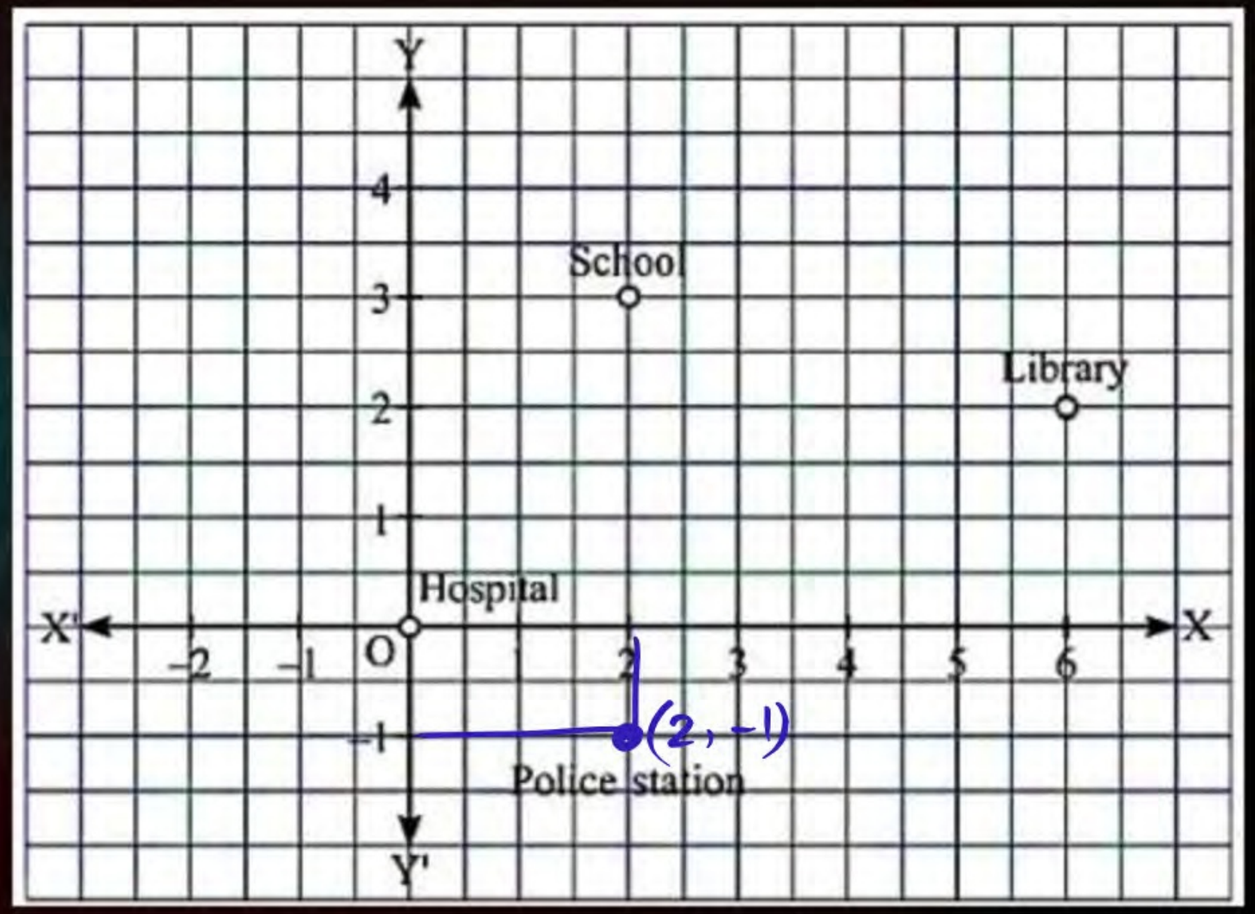
What are the coordinates of Police Station?

A $(2, -1)$

B $(2, 1)$

C $(-2, -1)$

D $(-2, 1)$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

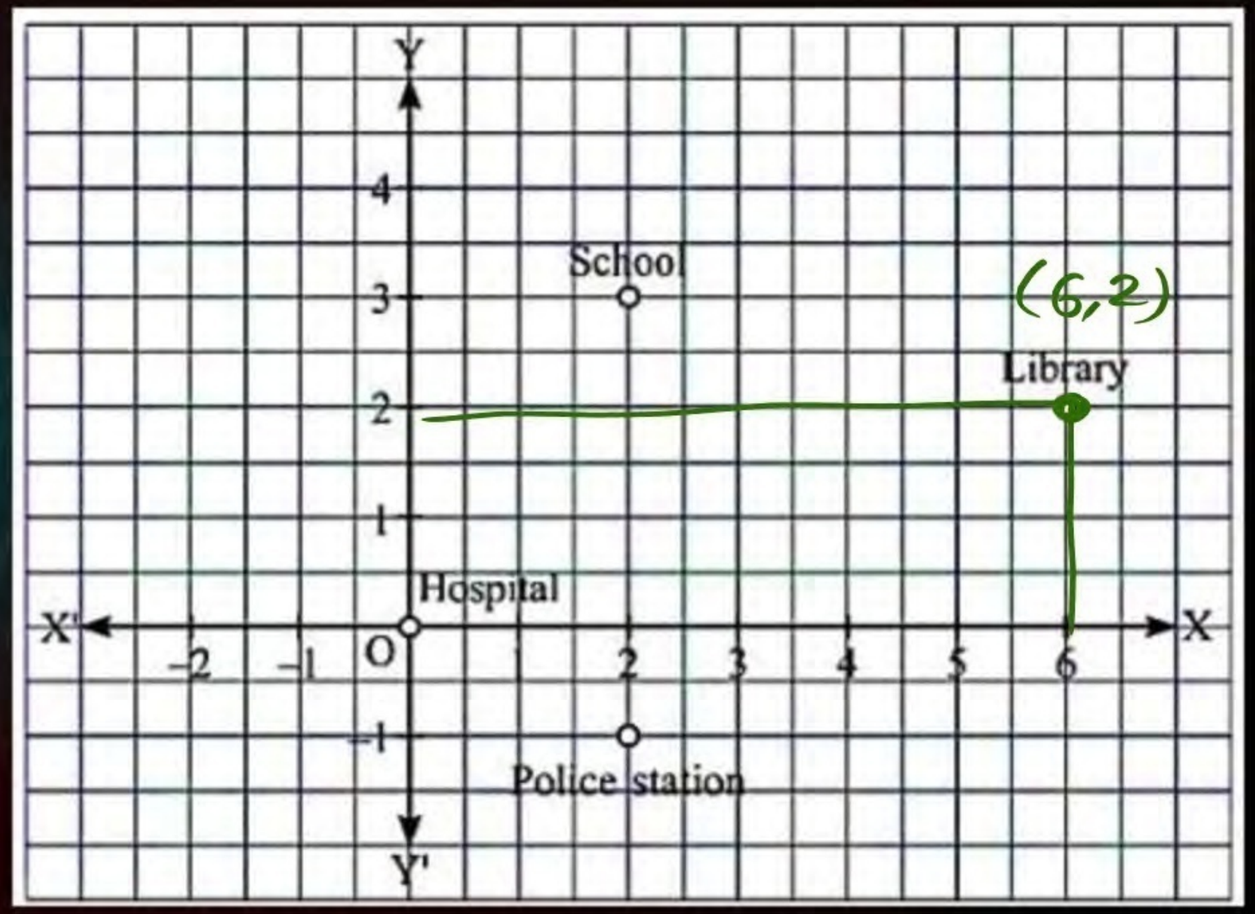
What are the coordinates of Library?

$(2, -6)$

$(2, 6)$

$(6, -2)$

$(6, 2)$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

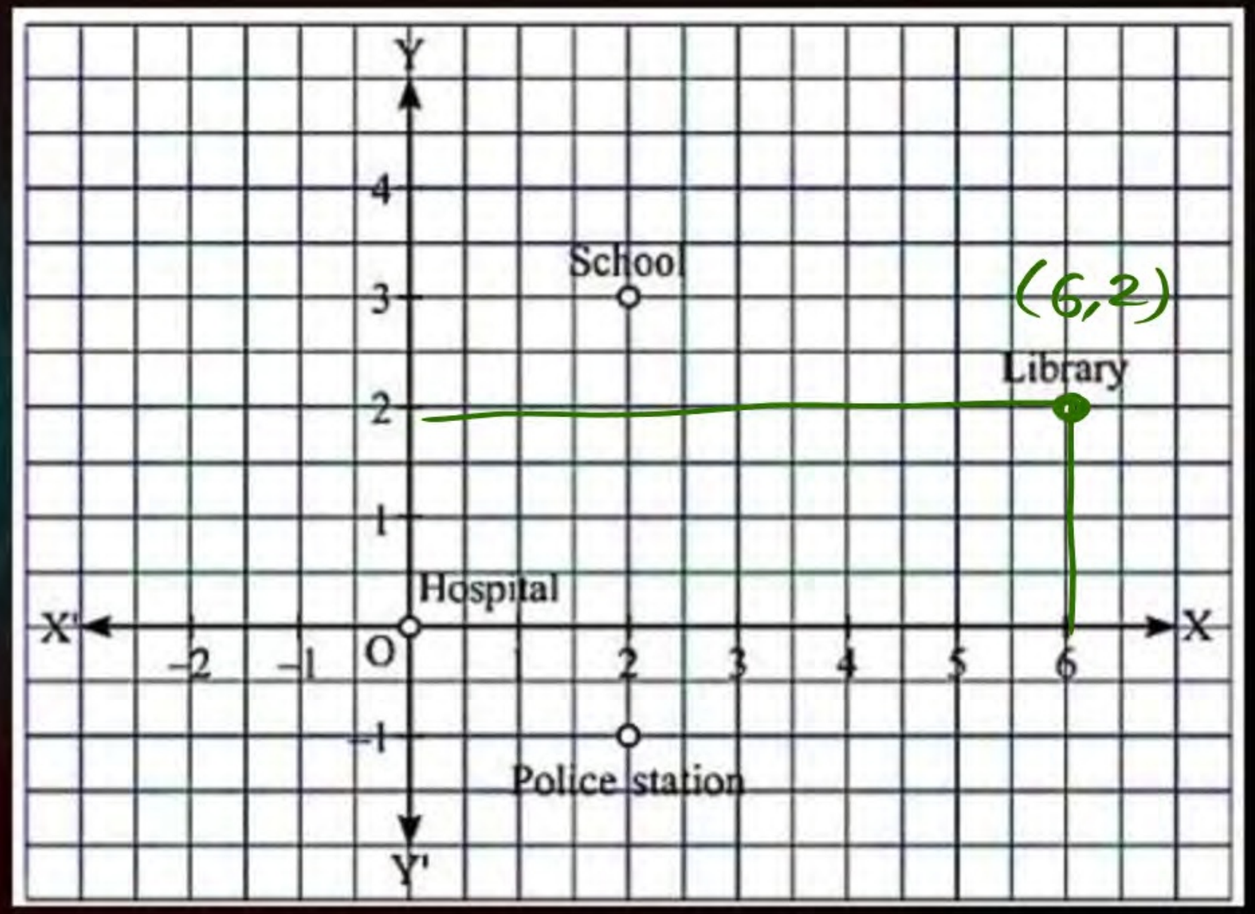
What are the coordinates of Library?

A $(2, -6)$

B $(2, 6)$

C $(6, -2)$

D $(6, 2)$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

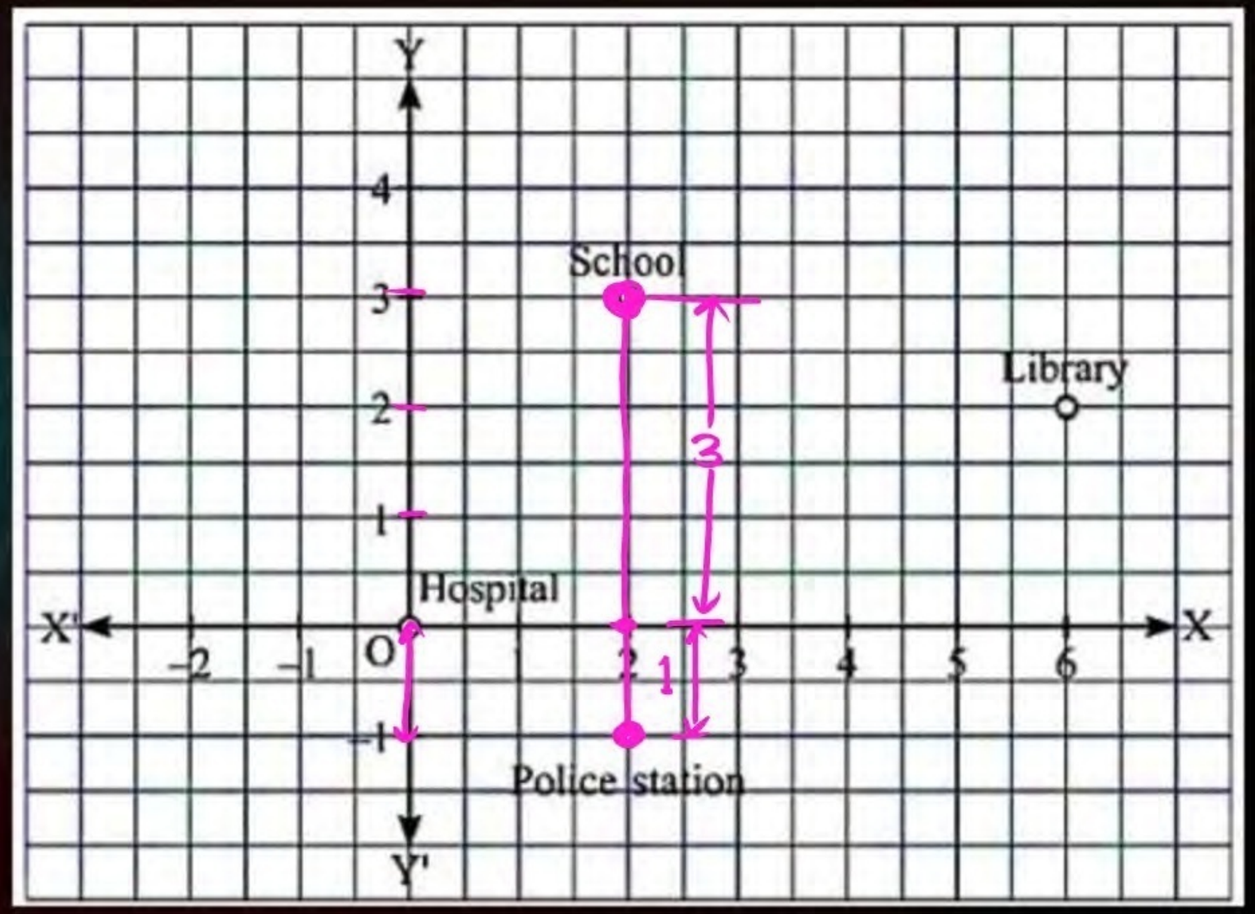
Distance between school and police station:

4 *units*

3 *units*

2 *units*

1 *unit*

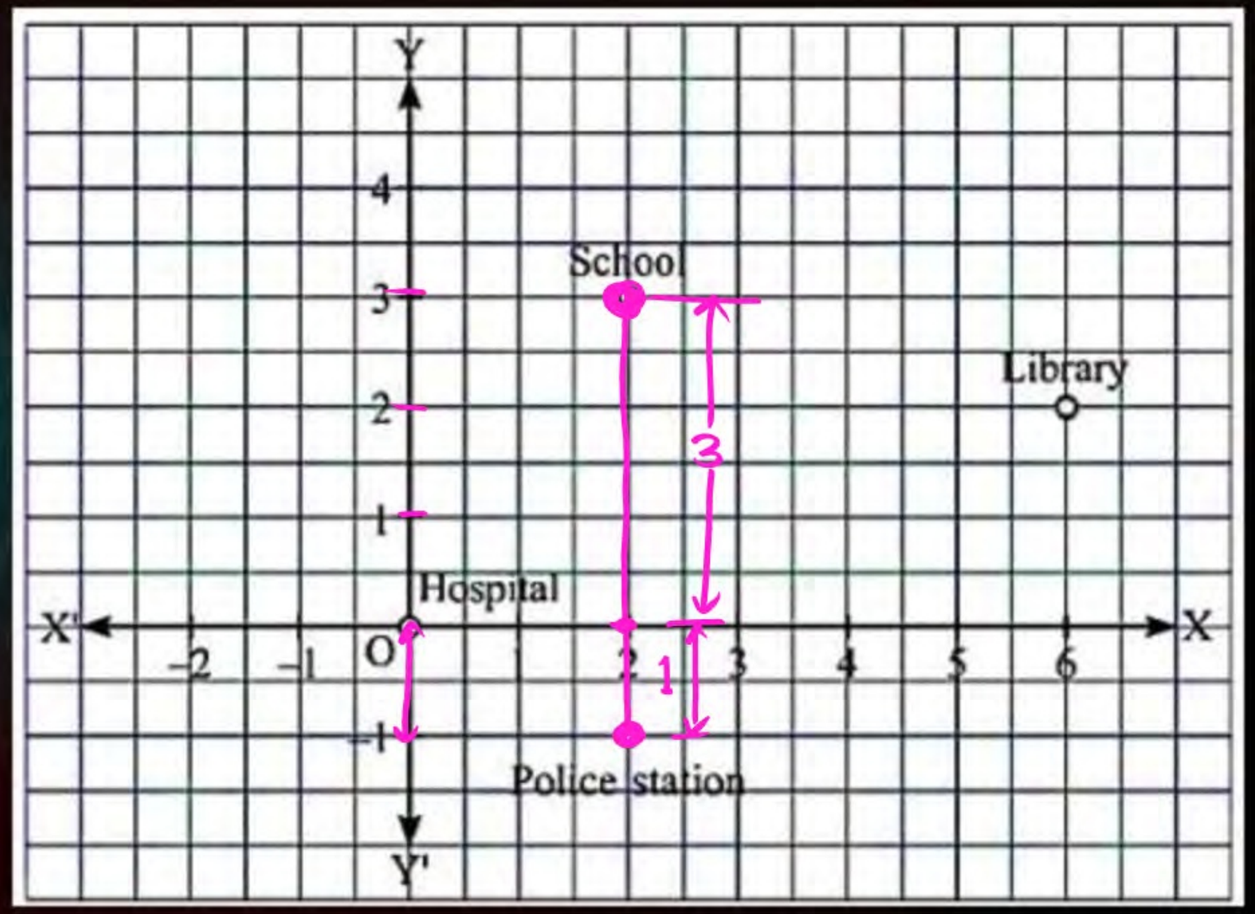


VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Distance between school and police station:

- **A** 4 units
- **B** 3 units
- **C** 2 units
- **D** 1 unit



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

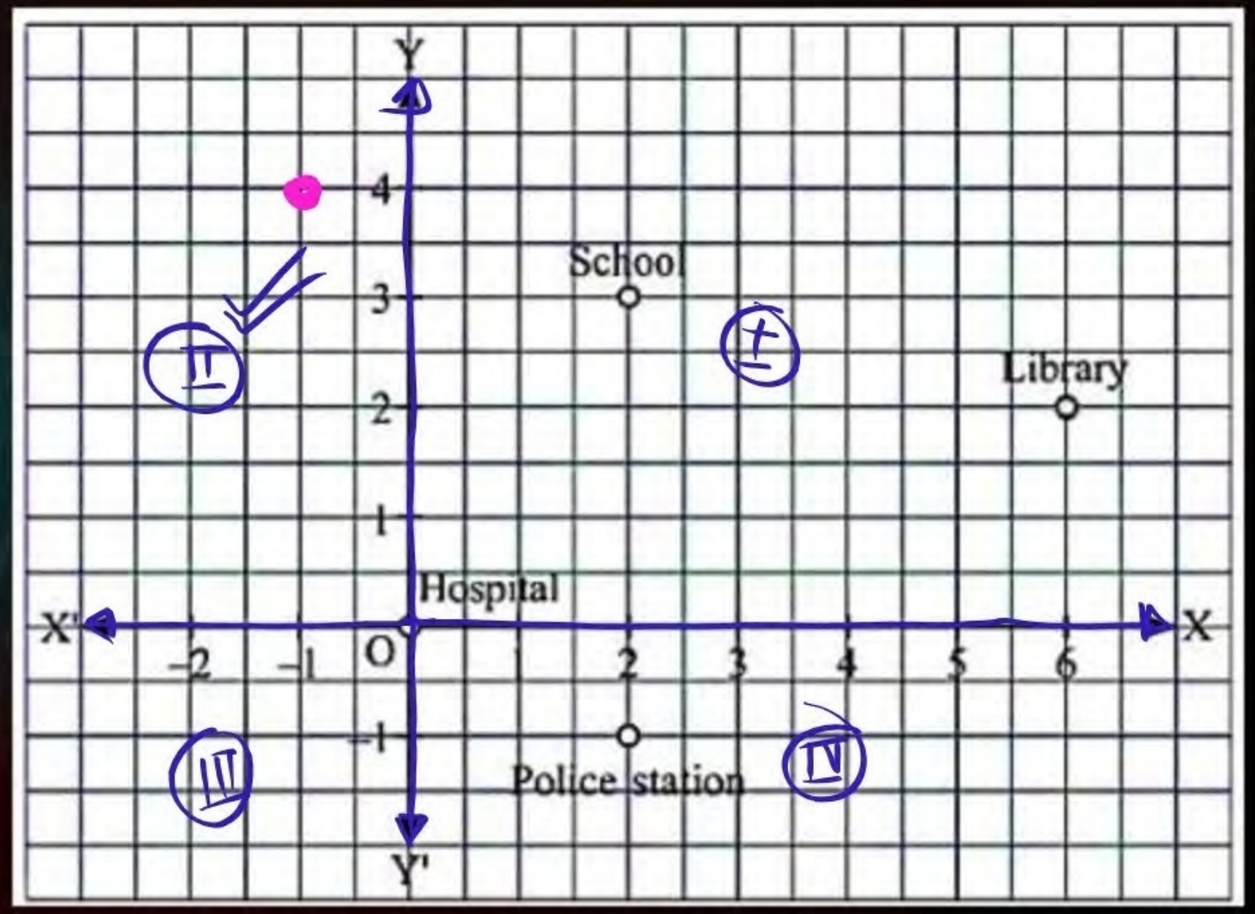
In which quadrant the point $(-1, 4)$ lies?

I Quadrant

II Quadrant

III Quadrant

IV Quadrant



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

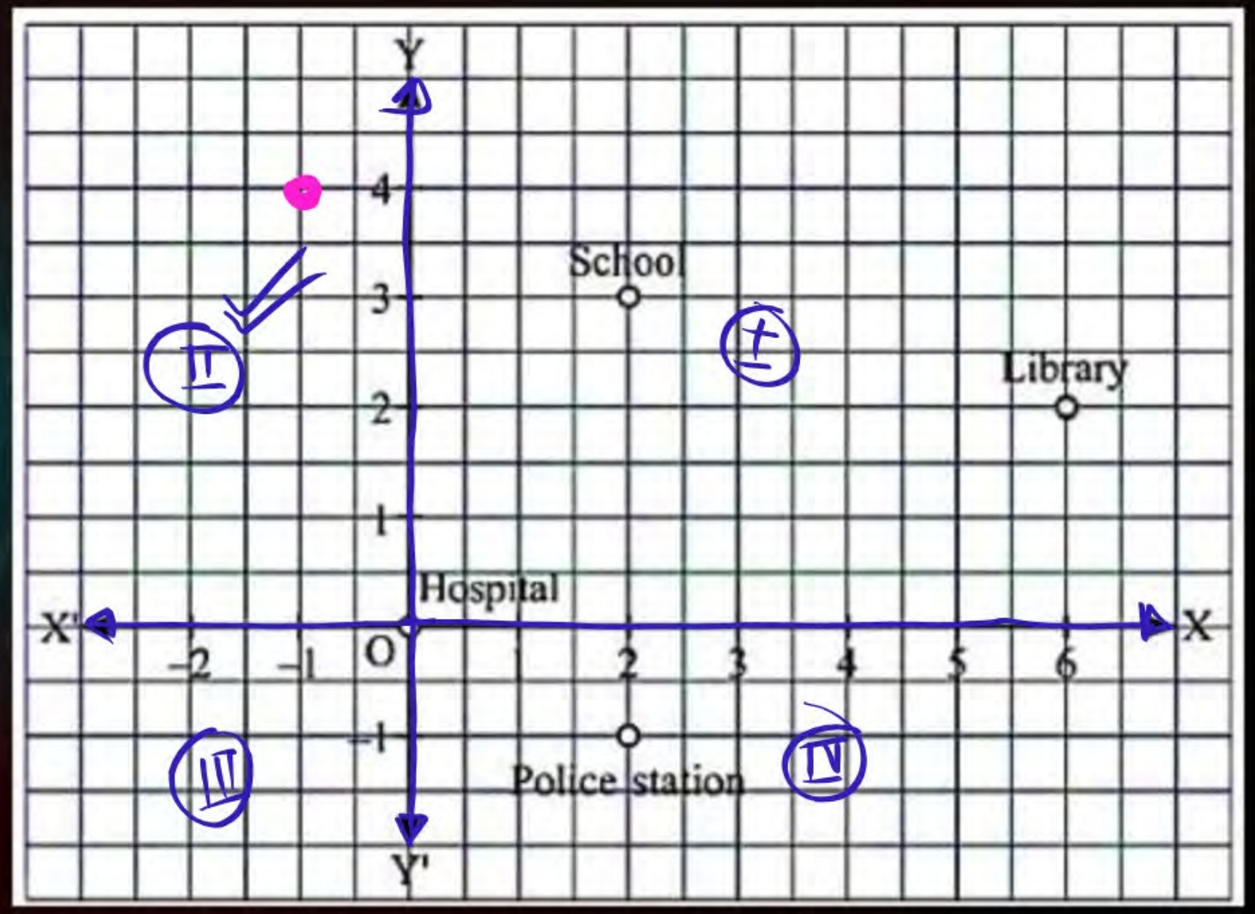
In which quadrant the point $(-1, 4)$ lies?

A. *I* Quadrant

B. *II* Quadrant

C. *III* Quadrant

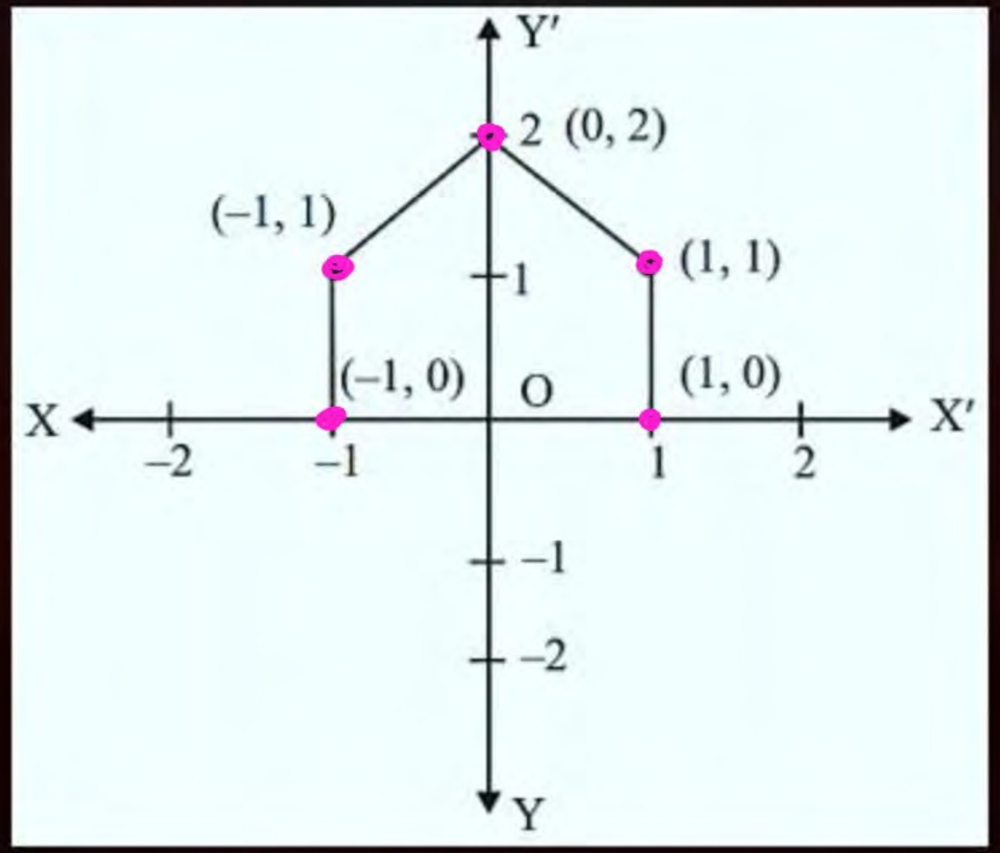
D. *IV* Quadrant



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Cased-Based Type Questions

Cased-Based: Sohan draws a gate of a temple on the paper. He has following points: (–1, 0), (1, 0), (1, 1), (–1, 1) and (0, 2)



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

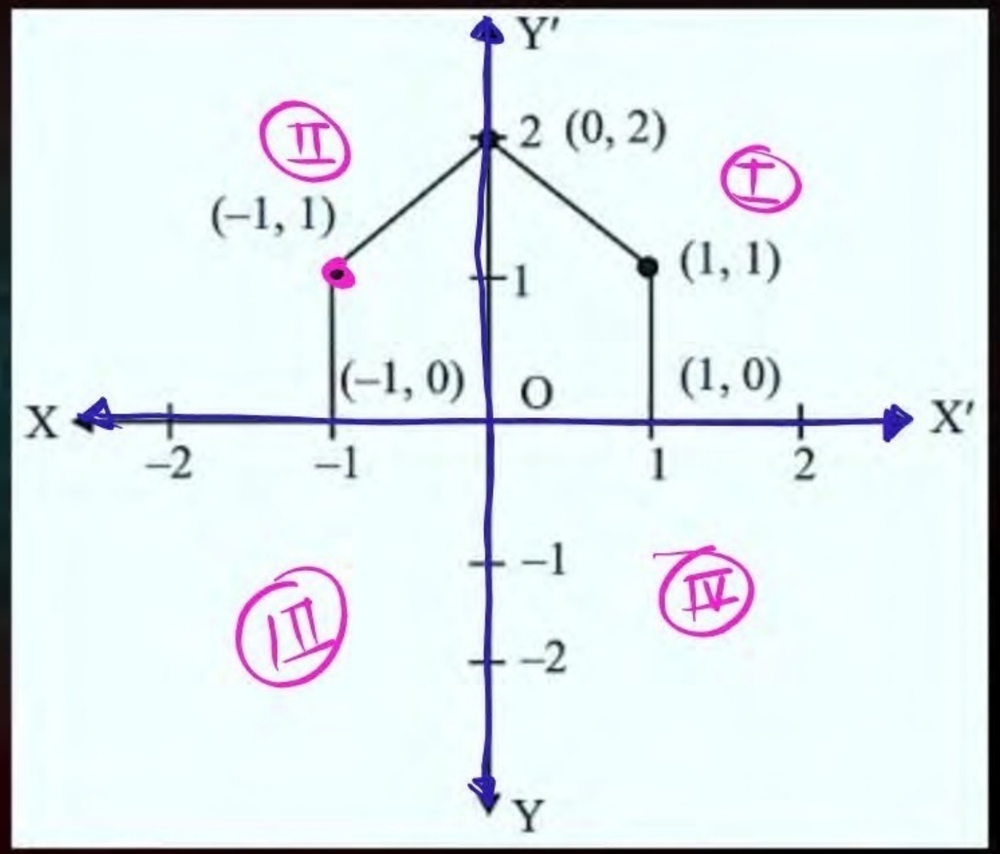
In which quadrant (–1, 1) lies?

I Quadrant

II Quadrant

III Quadrant

IV Quadrant



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

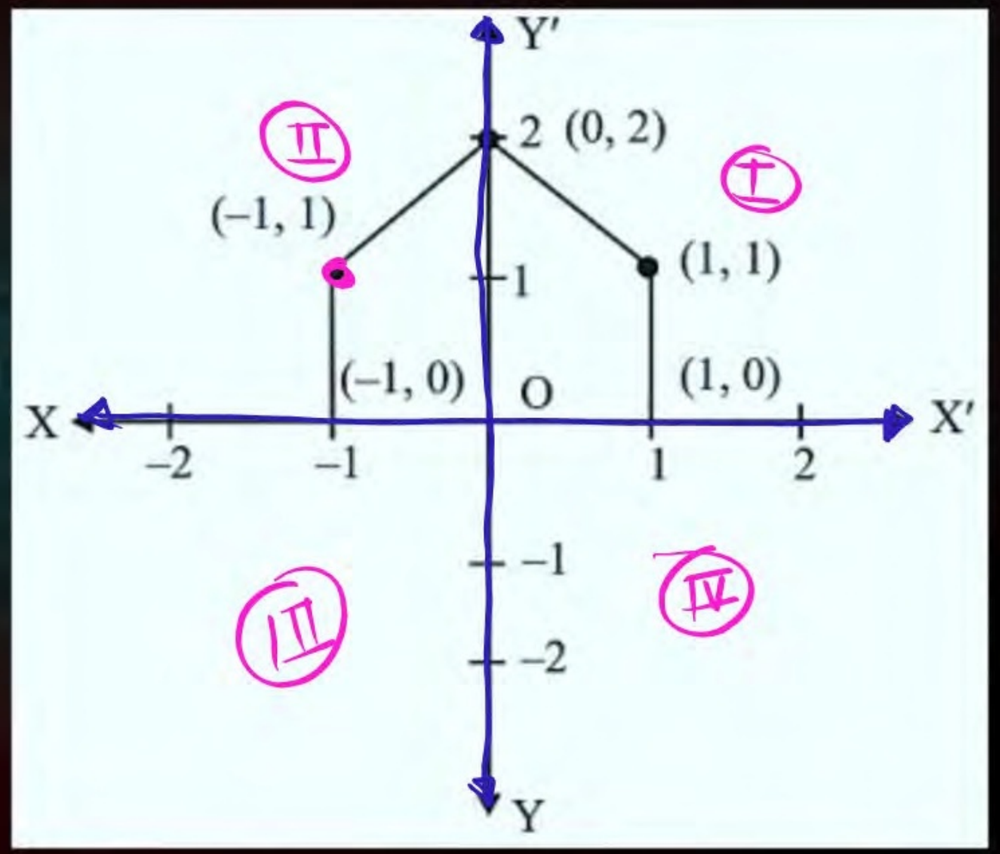
In which quadrant (–1, 1) lies?

A. *I* Quadrant

B. *II* Quadrant

C. *III* Quadrant

D. *IV* Quadrant



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

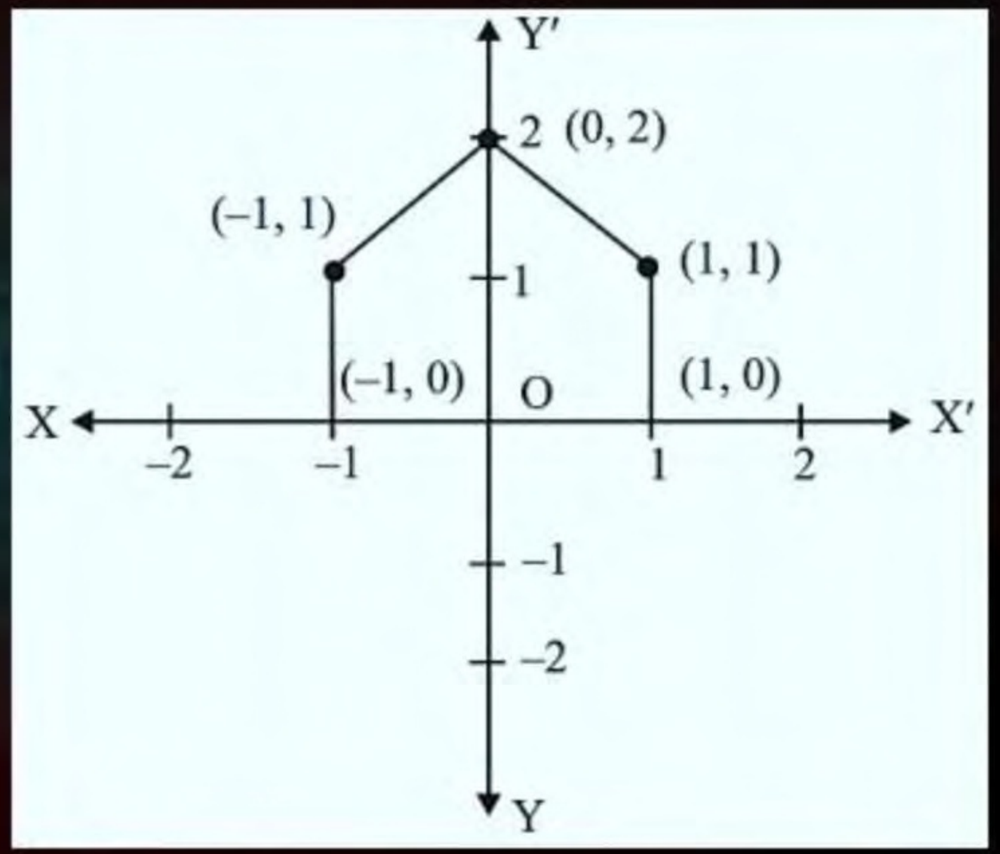
Write the abscissa of the point (0, 2).

0

−2

2

1



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Write the abscissa of the point (0, 2).

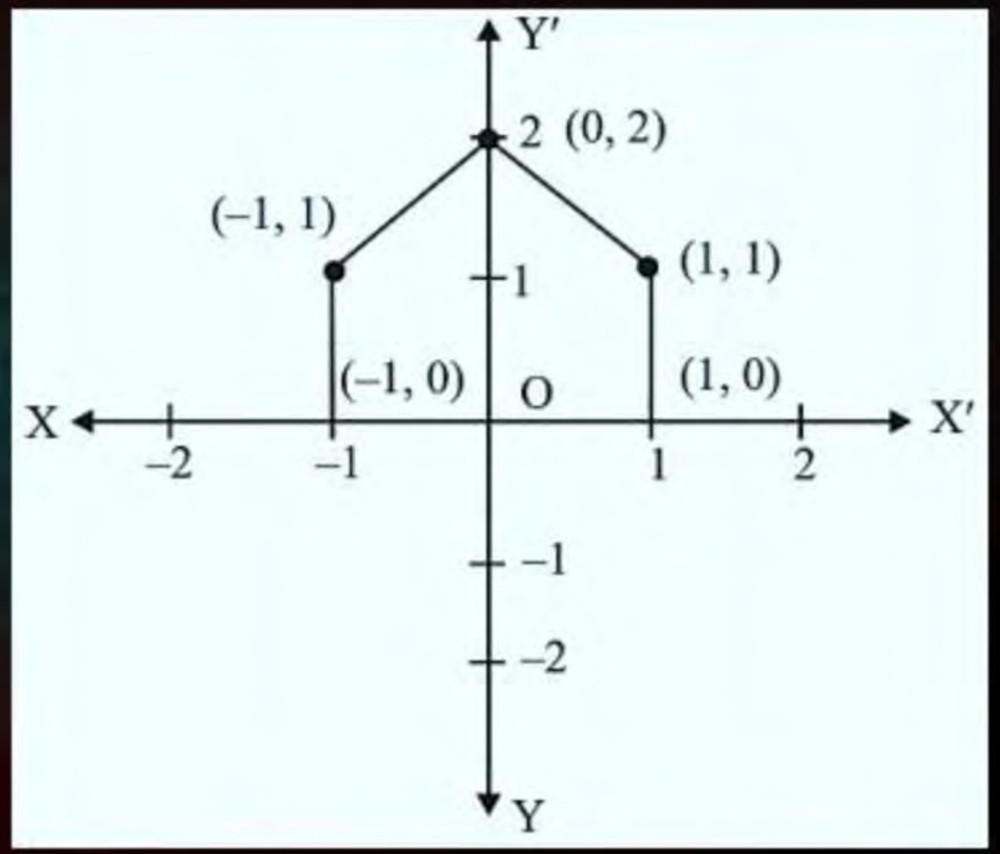
x-coordinate

A. 0

B. −2

C. 2

D. 1



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

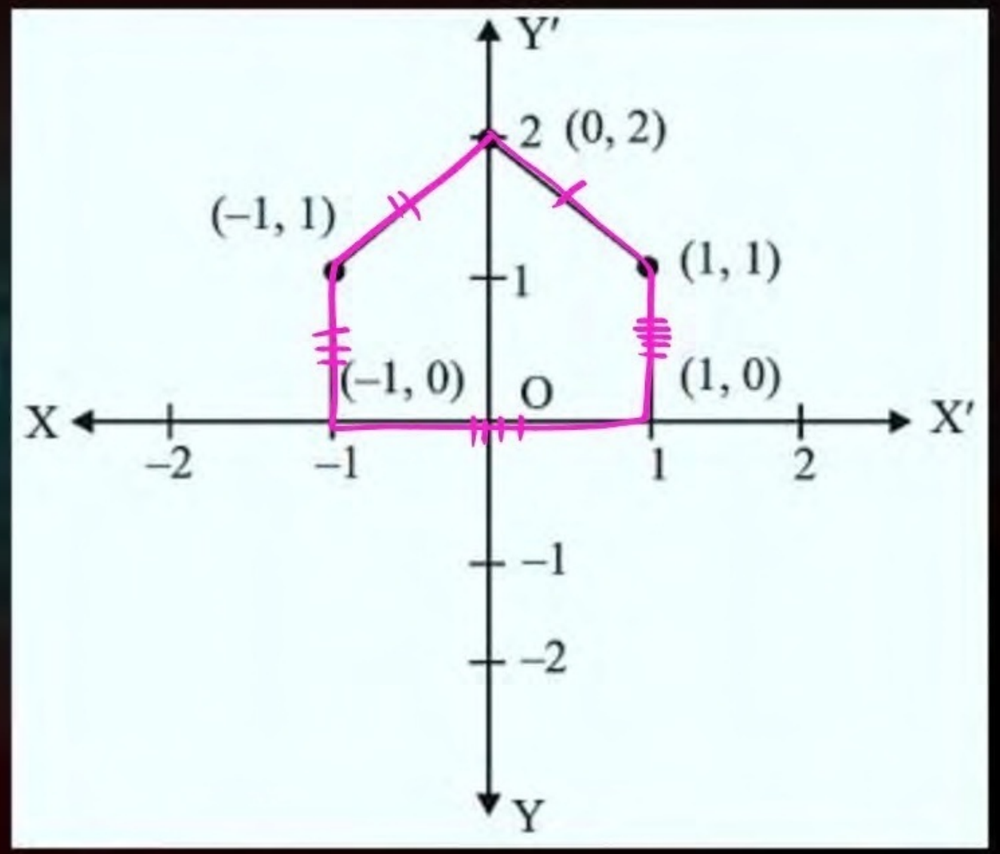
Name the closed figure obtained.

Quadrilateral

Triangle

Pentagon

Hexagon



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

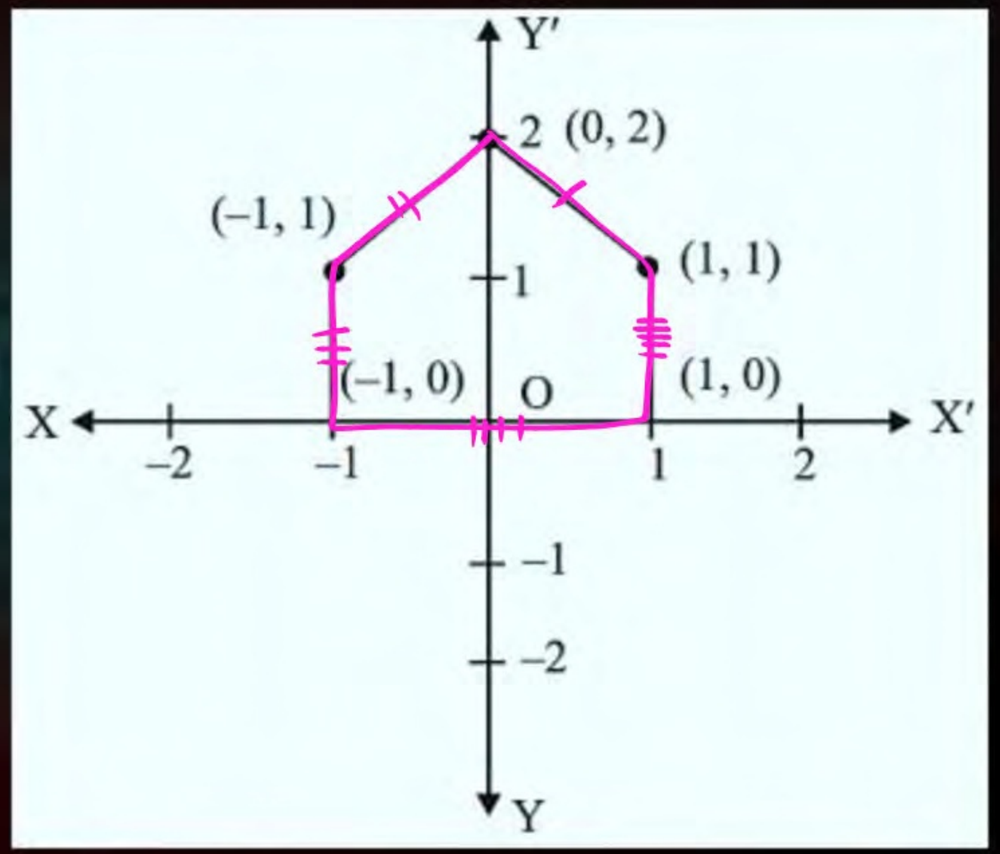
Name the closed figure obtained.

A. *Quadrilateral*

B. *Triangle*

C. *Pentagon*

D. *Hexagon*



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

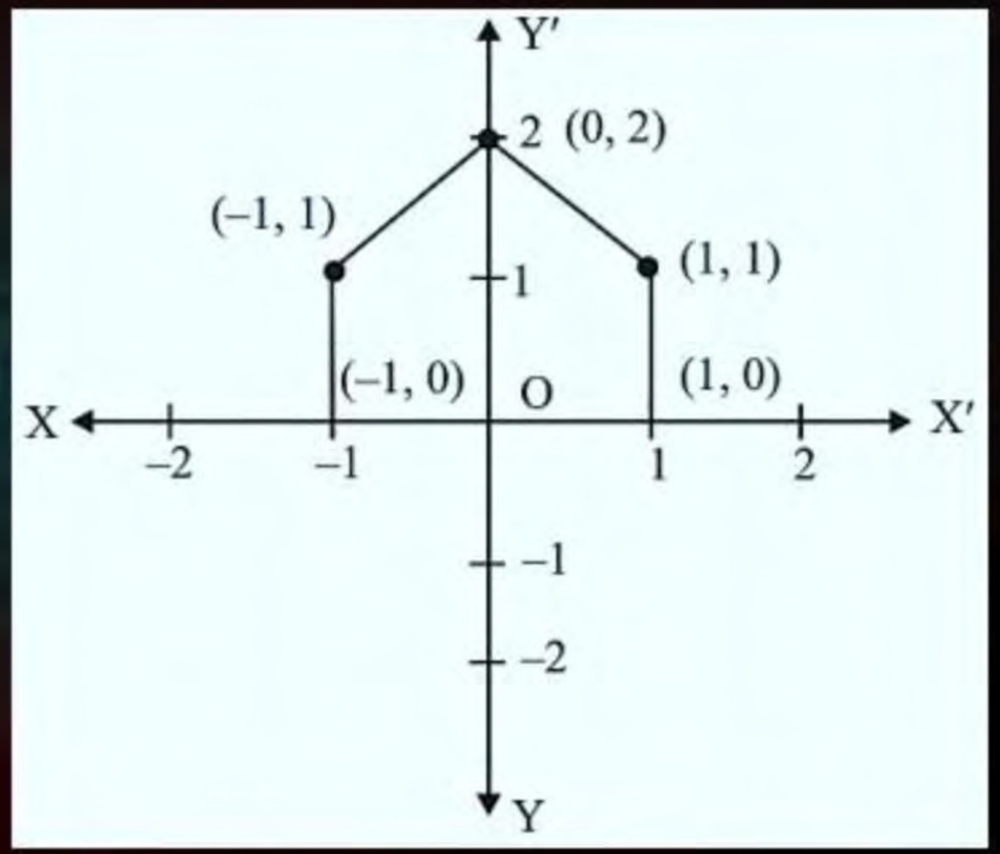
Write the ordinate of the point (1, 0).

−1

0

2

1



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Write the ordinate of the point (1, 0).

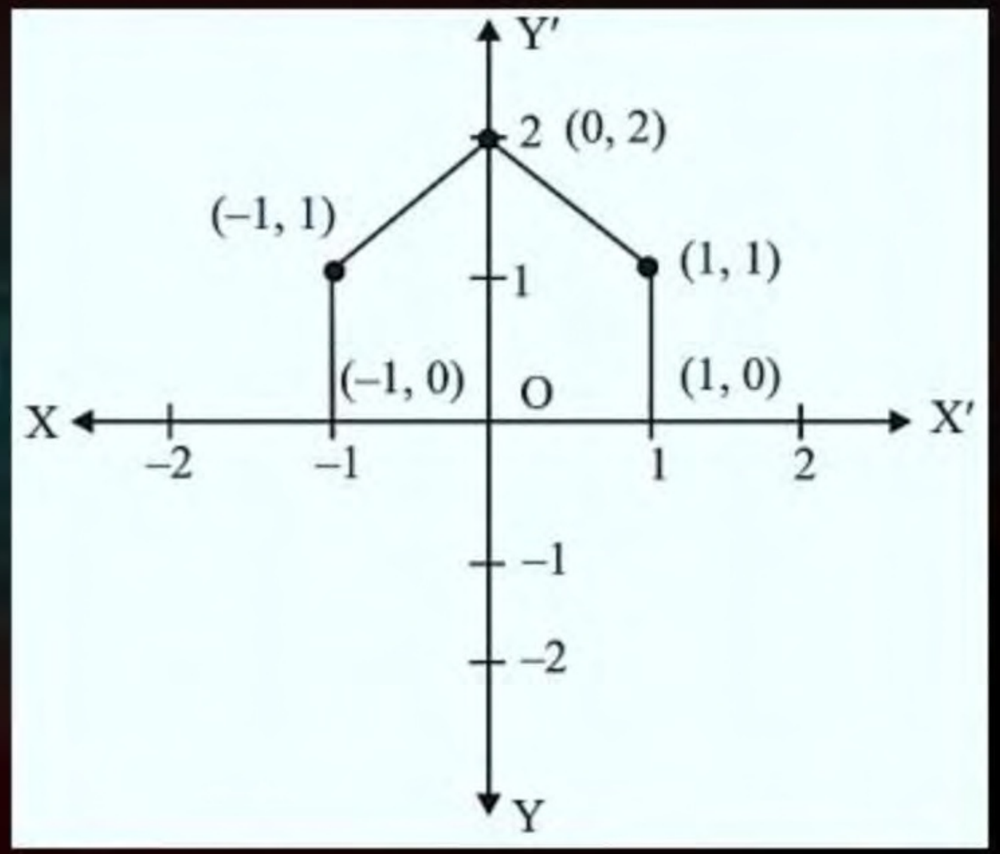
y- coordinate

A. −1

B. 0

C. 2

D. 1



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

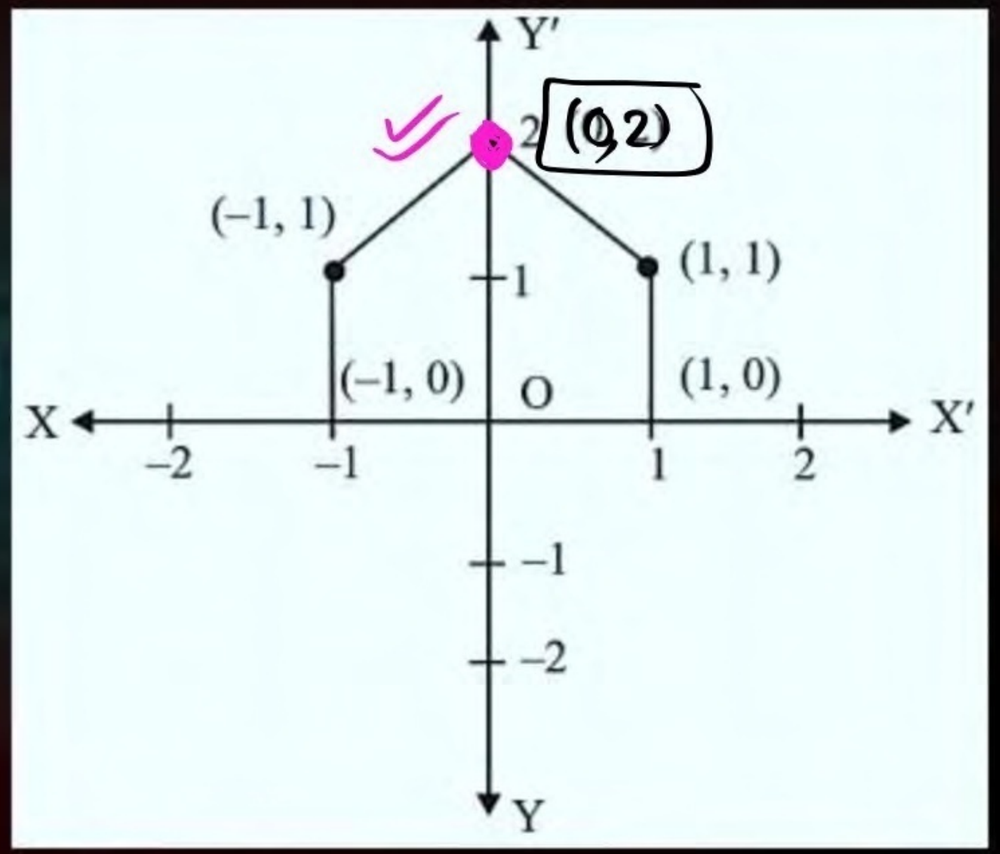
Which point from the following lies on y-axis?

$(-1, 0)$

$(1, 1)$

$(0, 2)$

$(-1, 1)$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

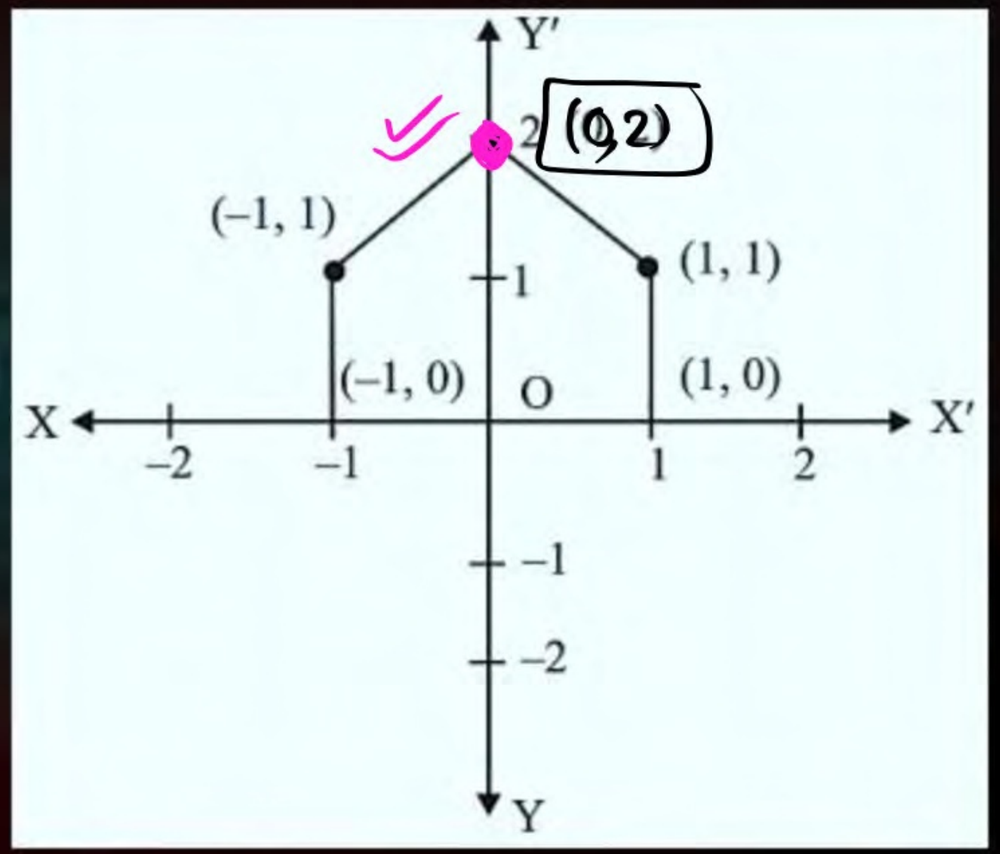
Which point from the following lies on y-axis?

A $(-1, 0)$

B $(1, 1)$

C $(0, 2)$

D $(-1, 1)$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

A point $(x+3, x+4)$ lies in the first quadrant, the mirror image for which about x-axis is $(5, -6)$. What is the value of x?

1

3

2

4

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

A point $(x+3, x+4)$ lies in the first quadrant, the mirror image for which about x-axis is $(5, -6)$. What is the value of x?

$(x+3, x+4) = (5, 6)$

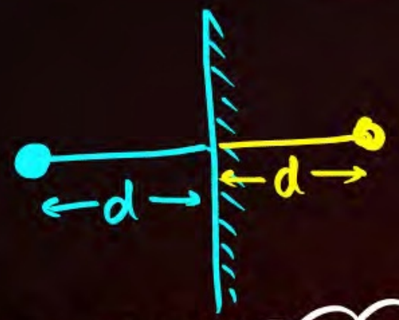
$x+3 = 5 \Rightarrow \boxed{x=2}$

A 1

B 3

C 2

D 4



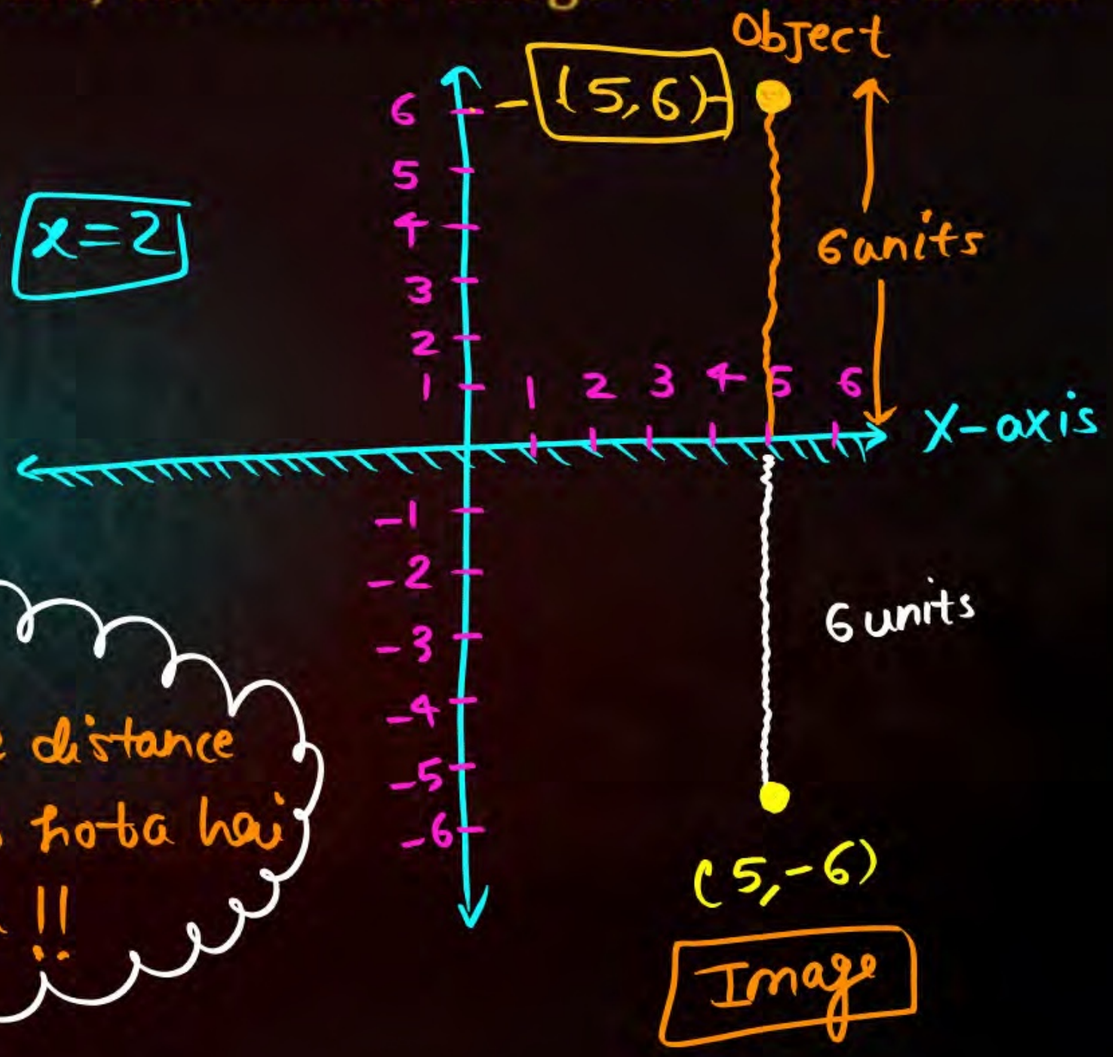
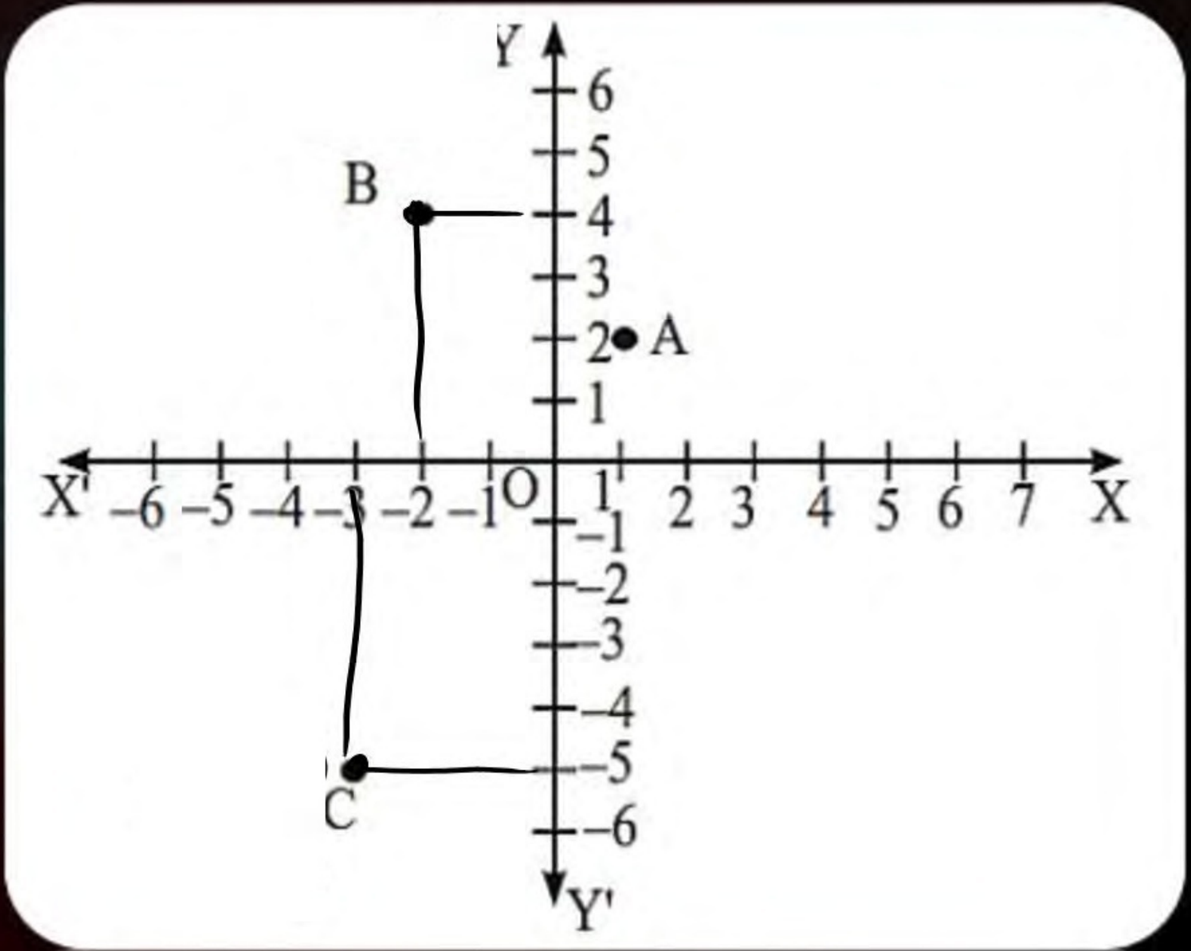


Image mirror se utna hi distance pe banega Jitane distance pe object mirror ke sath hota hai aur same line pe banega !!

Question

Observe the following figure and find 4 (Ordinate of B) + 3 (Ordinate of C).



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

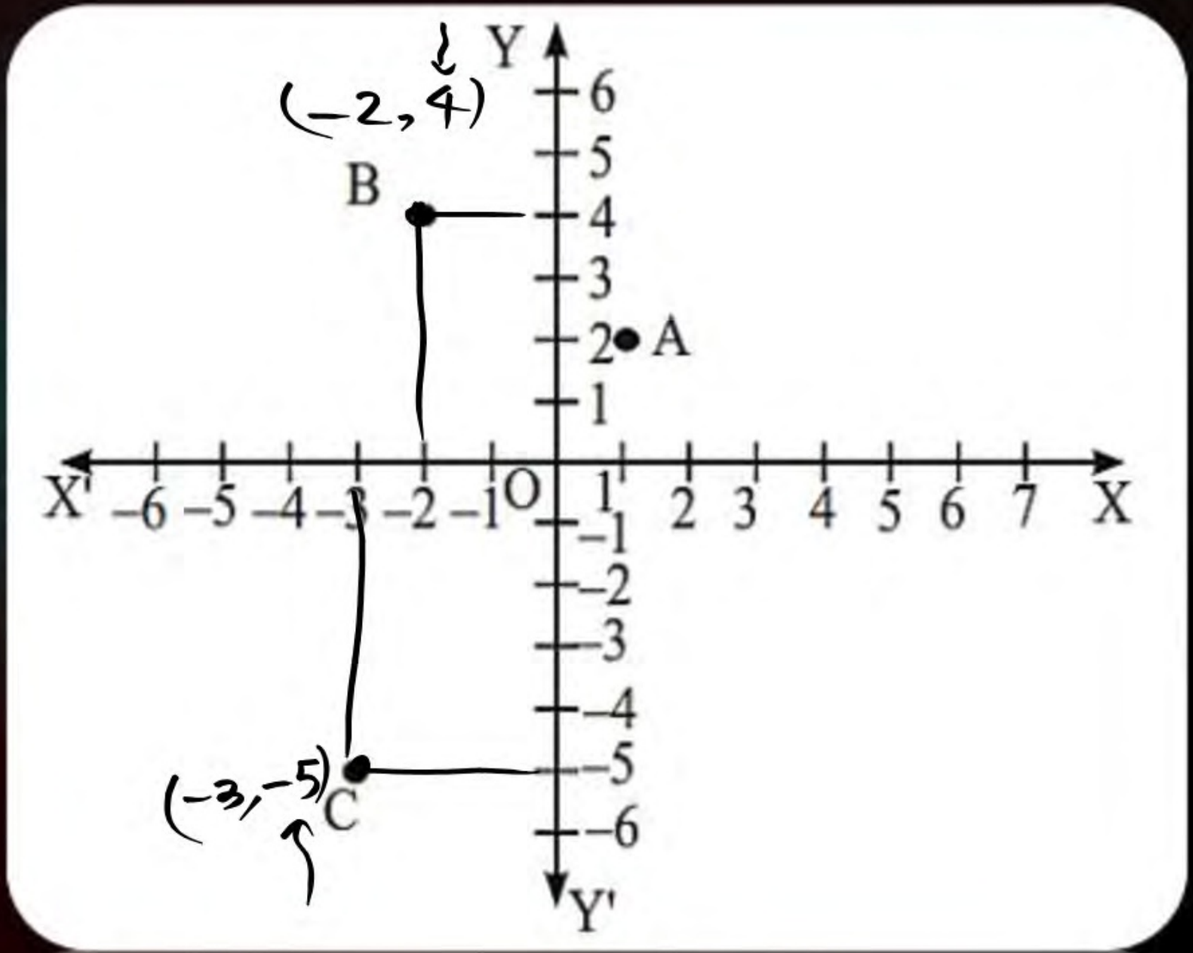
Question

Observe the following figure and find 4 (Ordinate of B) + 3 (Ordinate of C).

$= 4(4) + 3(-5)$

$= 16 - 15$

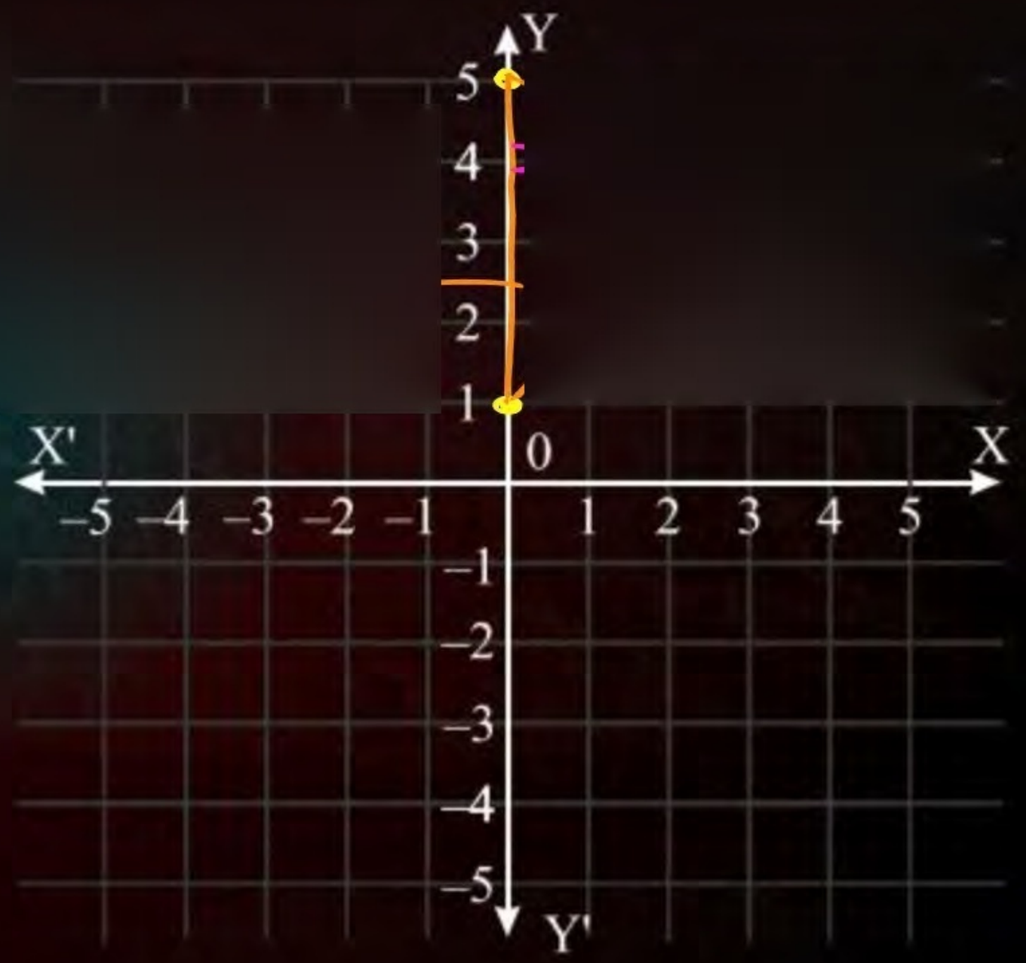
$= \boxed{1}$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Find the area of the triangle formed by the points P(0, 1), Q(0, 5) and R(3, 4).



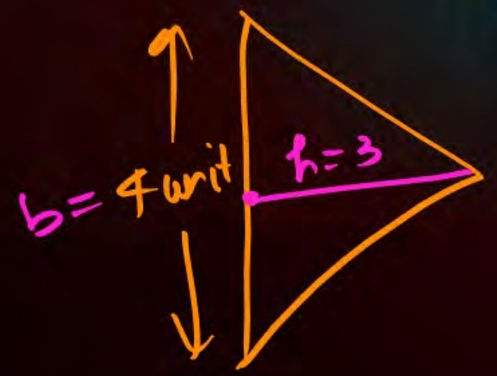
VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

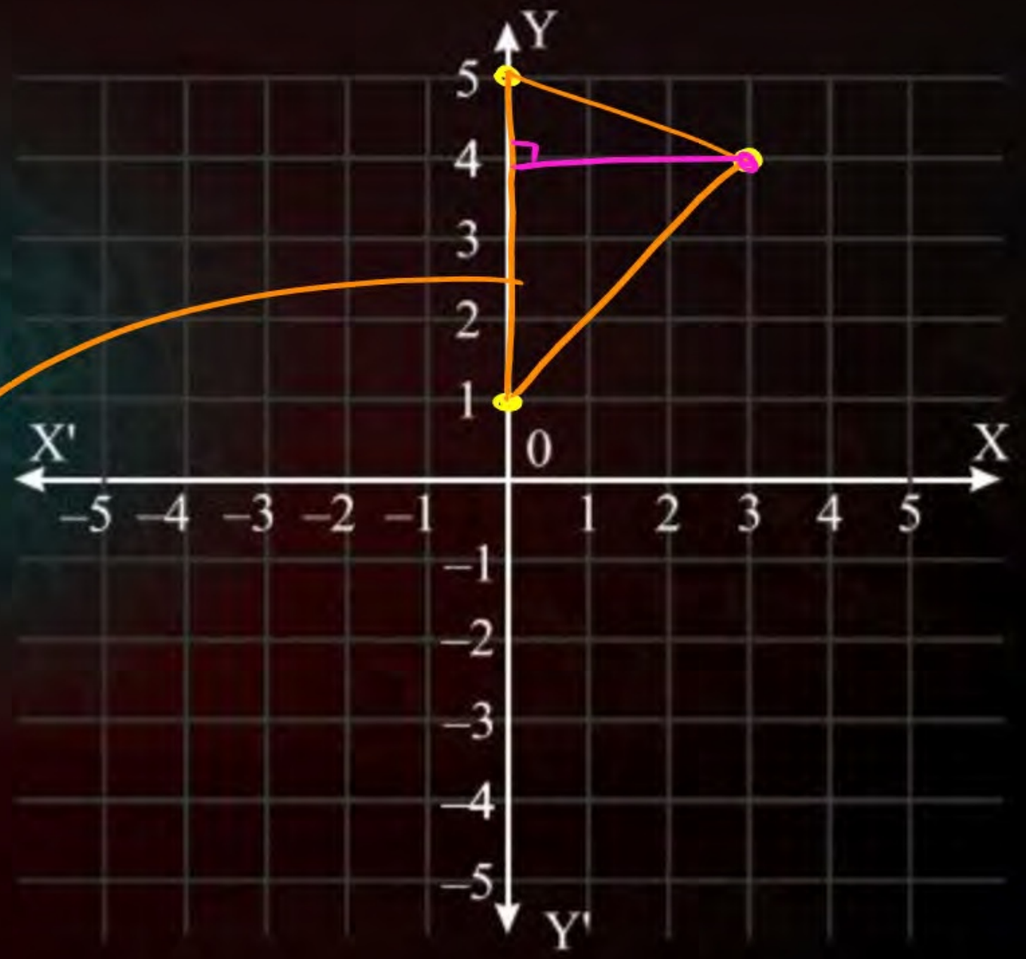
Question

Find the area of the triangle formed by the points P(0, 1), Q(0, 5) and R(3, 4).

Area of $\Delta = \frac{1}{2} \times \text{Base} \times \text{height}$

$= \frac{1}{2} \times 4 \times 3 = \boxed{6 \text{ unit}^2}$

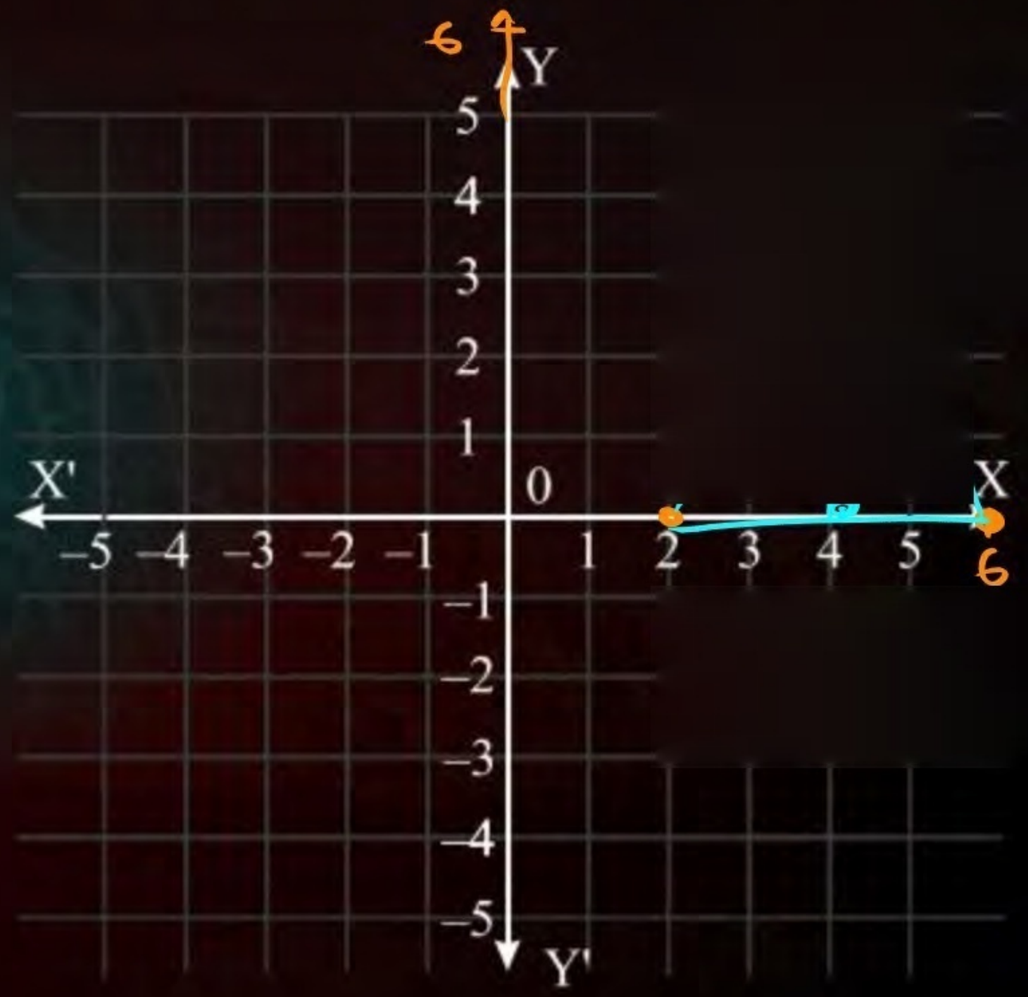




VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Find the area of the triangle formed by the points P(2, 0), Q(6, 0) and R(4, 6)?



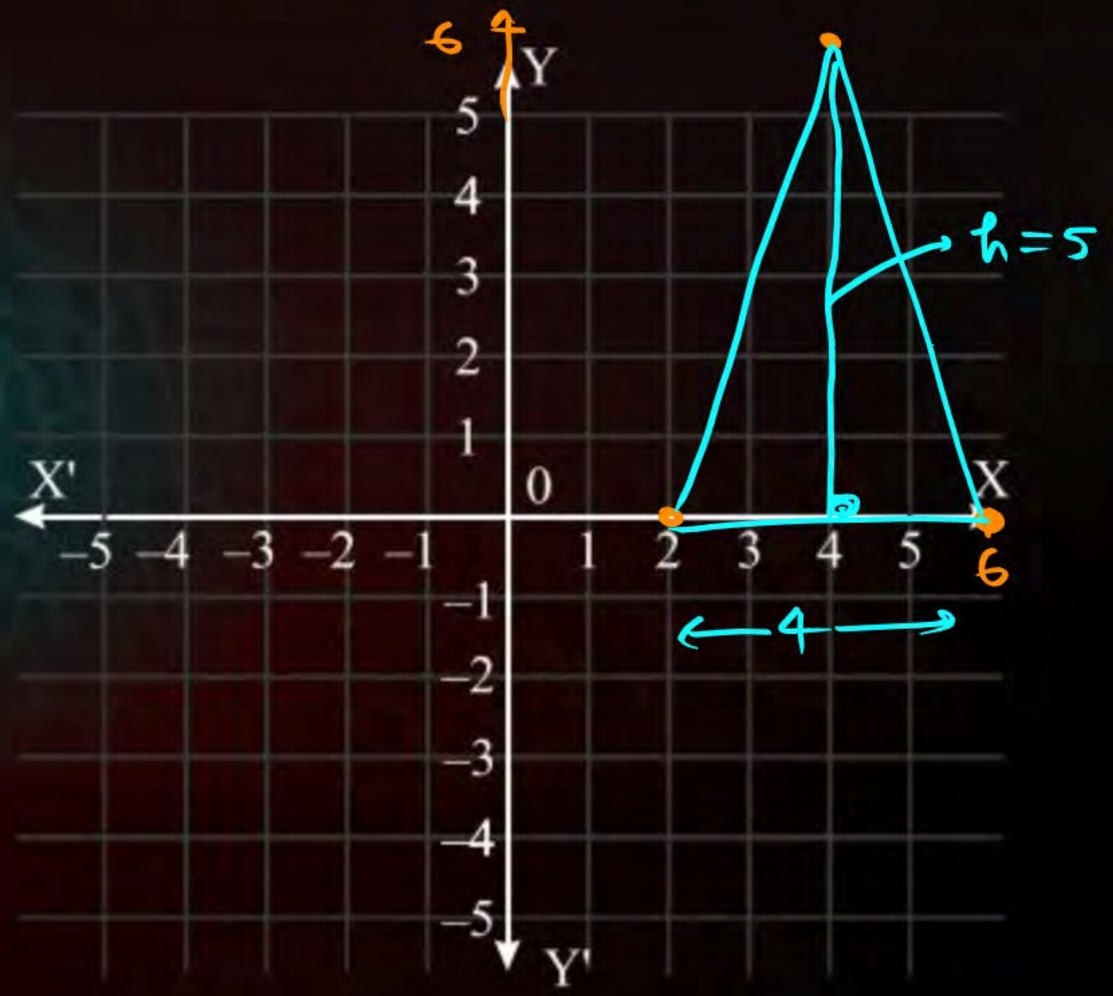
VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

Find the area of the triangle formed by the points P(2, 0), Q(6, 0) and R(4, 6)?

Area of $\Delta = \frac{1}{2} \times 4 \times 5$

$= \boxed{10 \text{ unit}^2}$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

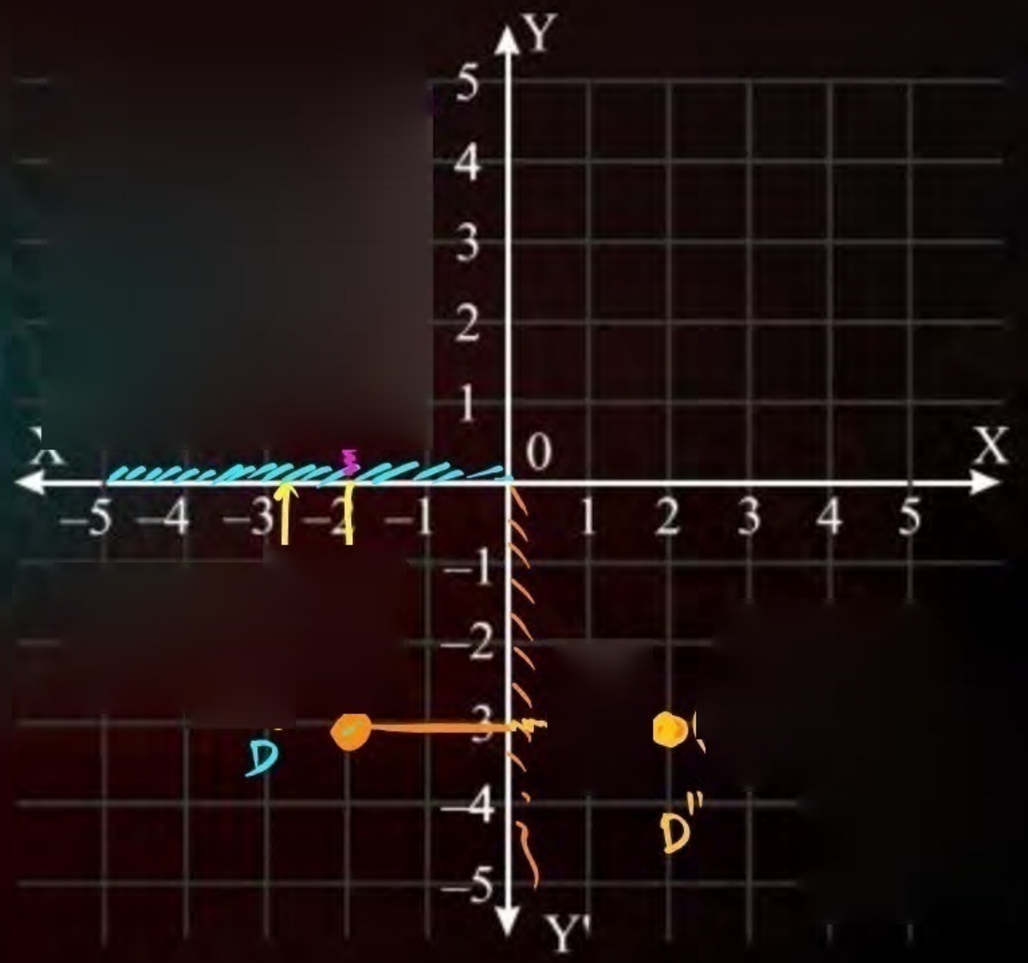
Plot D(–2, –3), on the graph paper. Reflections of D(–2, –3) in x-axis and y-axis respectively are

(–2, –3) and (–2, 3)

(2, 3) and (–2, 3)

(–2, 3) and (–2, –3)

None of these



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

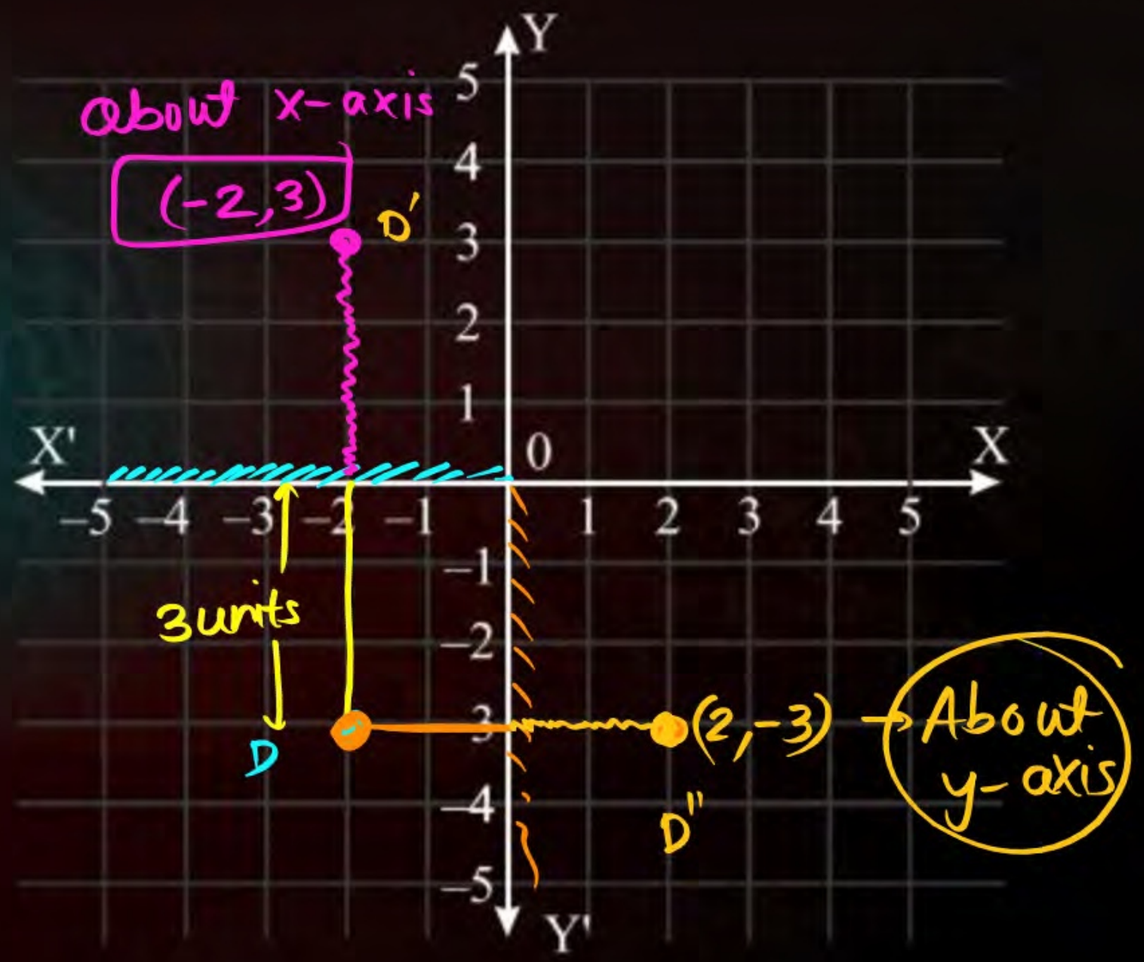
Plot D(–2, –3), on the graph paper. Reflections of D(–2, –3) in x-axis and y-axis respectively are

A. (–2, –3) and (–2, 3)

B. (2, 3) and (–2, 3)

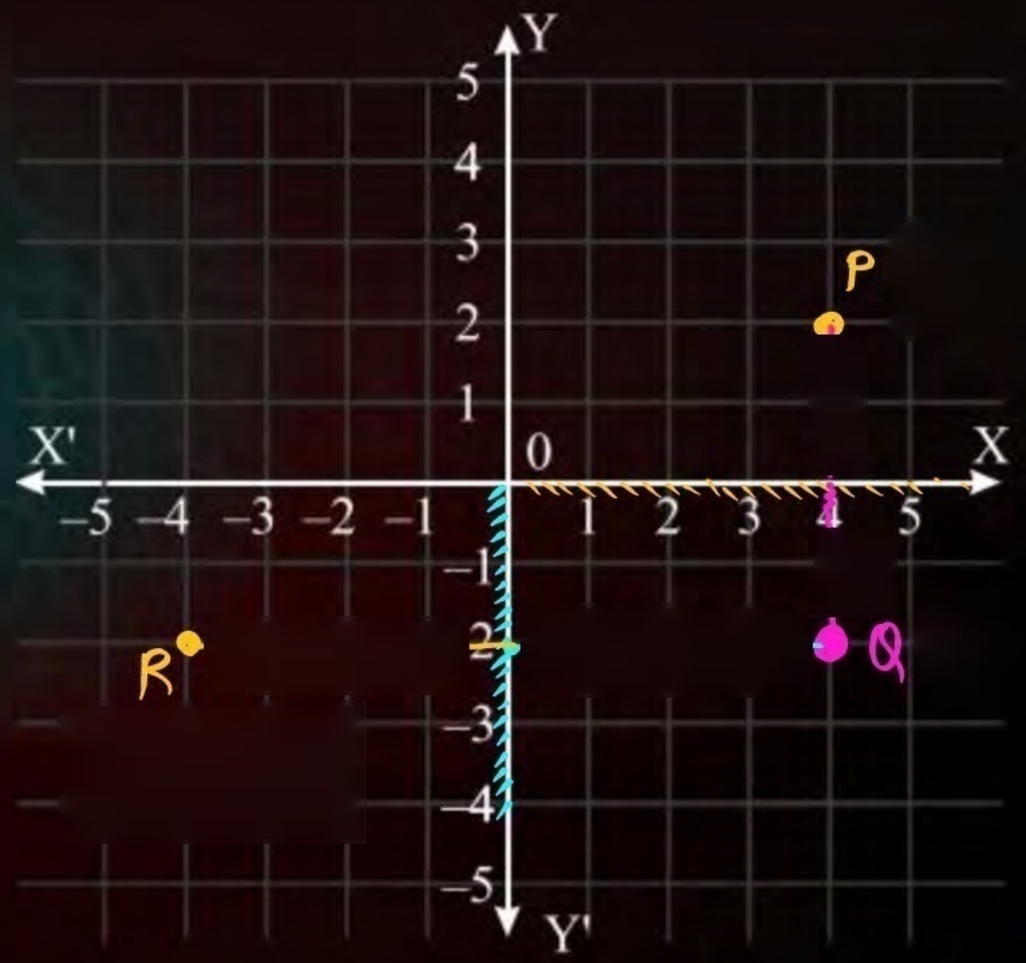
C. (–2, 3) and (–2, –3)

D. None of these



Question

If the mirror image of the point P(4, 2) in x-axis is the point Q and the image Q in y-axis is R. Then find the coordinates of R.

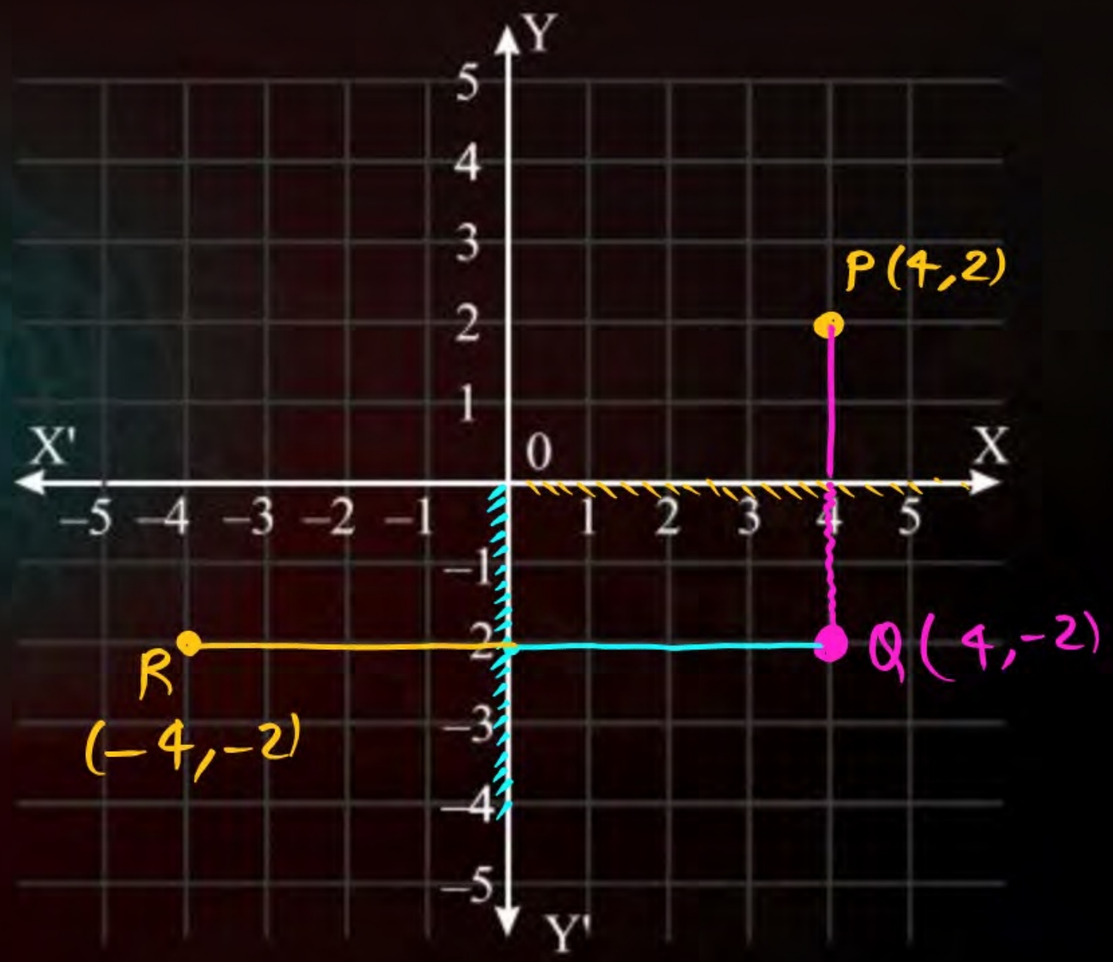


VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

Question

If the mirror image of the point P(4, 2) in x-axis is the point Q and the image Q in y-axis is R. Then find the coordinates of R.

Final Answer: $\boxed{R = (-4, -2)}$



VIPIN KAUSHIK ASOSE SURAJMAL VIHAR

VIPIN KAUSHIK ASOSE SURAJMAL VIHAR