3. Coordinate Geometry

Q 1 In which quadrant, the point P(x, y) will lie?, where x is a positive and y is a negative number.

Mark (1)

Q 2 Write the name of the point of intersection of coordinate axes.

Mark (1)

Q 3 Define quadrant.

Mark (1)

Q 4 Write the x-coordinate of a point which lies on y-axis.

Mark (1)

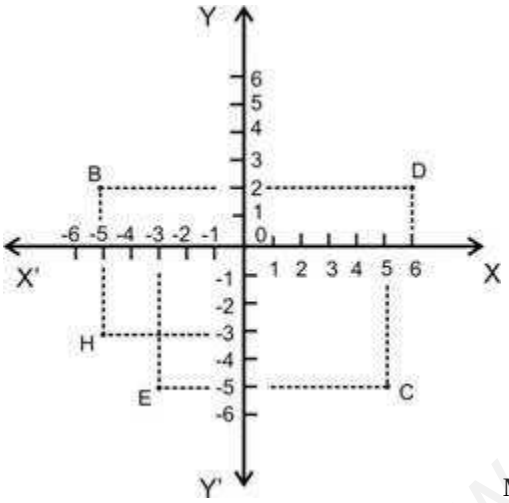
Q 5 What is the sign of the x-coordinate of a point in third quadrant.

Mark (1)

Q 6 If a point P(2,3) lies in first quadrant then what will be the coordinate of point Q opposite to it in fourth quadrant having equal distant from both the axes ?

Mark (1)

Q 7 In the fig. given below, name the point whose abscissa and ordinate both are positive and write the abscissa and ordinate of the point E :



Mark (1)

Q 8 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) Write the coordinates of the point where these two lines (as described above) intersect.

Marks (2)

Q 9 A point is at a distance of 4 units from x axis and 5 units from the y axis. Represent the position of the point in the Cartesian plane and also write its Cartesian coordinates.

Marks (2)

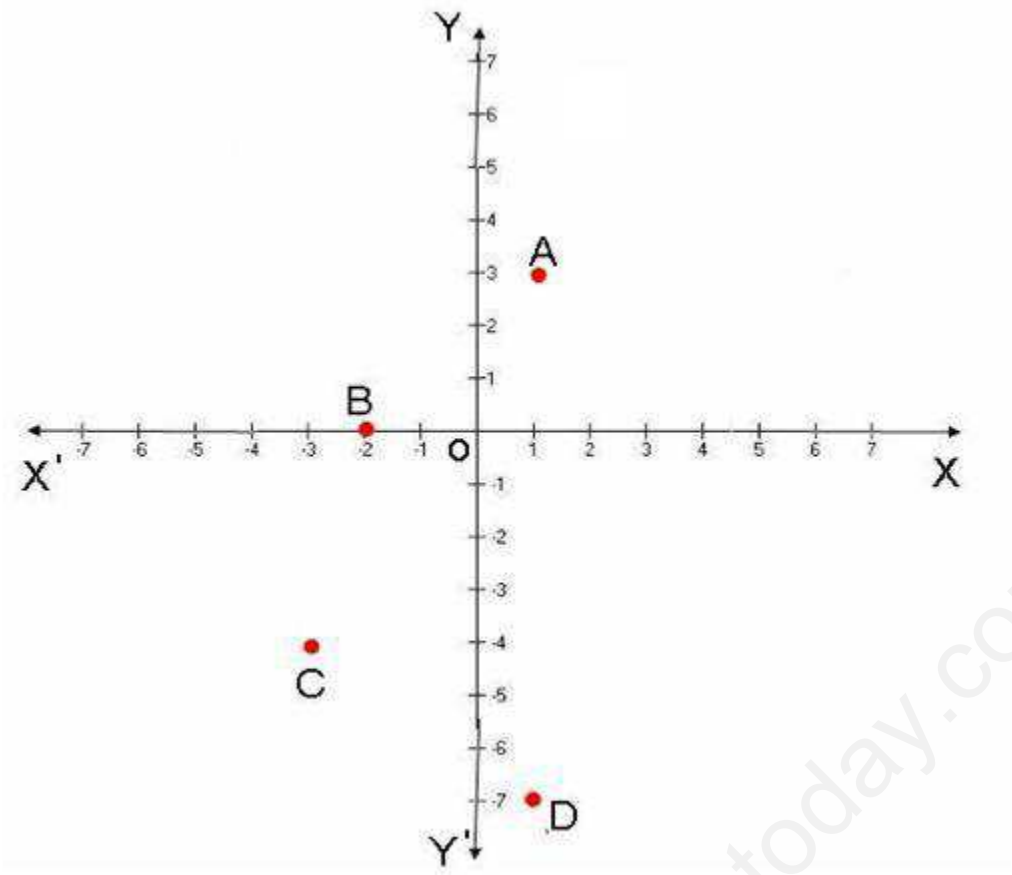
Q 10 Find the value of x and y if:

1) (x-3, 7) = (5,7)

2) (2,2y-3)=(2,7)

Marks (2)

Q 11 From the graph below determine the coordinates of the points A, B, C and D.



Marks (2)

Q 12 Plot the coordinates A (-4, 0) and B (3, 0) on the coordinate plane hence finds:

1) Distance of A from origin.
2) Distance of B from origin.
3) Distance between points.

Marks (2)

Q 13 In which quadrant does the following points lies?

1) A(-1, 2)
2) B(2, 2)
3) C(3,-2)
4) D(-2,-2)

Marks (2)

Q 14 Is Coordinate points (0, 5) and (5, 0) be same? Discuss.

Marks (2)

Q 15 If we plot the coordinate points A(-1, 0) , B(0, 1) , C(0,-1) and D(-1, 0) on Cartesian plane .
Which figure comes out after joining the Points? Also find the side of figure.

Marks (2)

Q 16 What is the distance of a point (7, -6) from x-axis and y-axis?

Marks (2)

Q 17 Which of the following points:

B(1, 0), C(0,1), E (-1, 0), F (0, -1), G (4, 0), H (0, -7)

(i) lie on x –axis?

(ii) lie on y – axis?

Marks (3)

Q 18 Locate the points (3, 0), (-2, 3), (2, -3), (-5, 4) and (-2, -4) in Cartesian plane. Also find the quadrant.

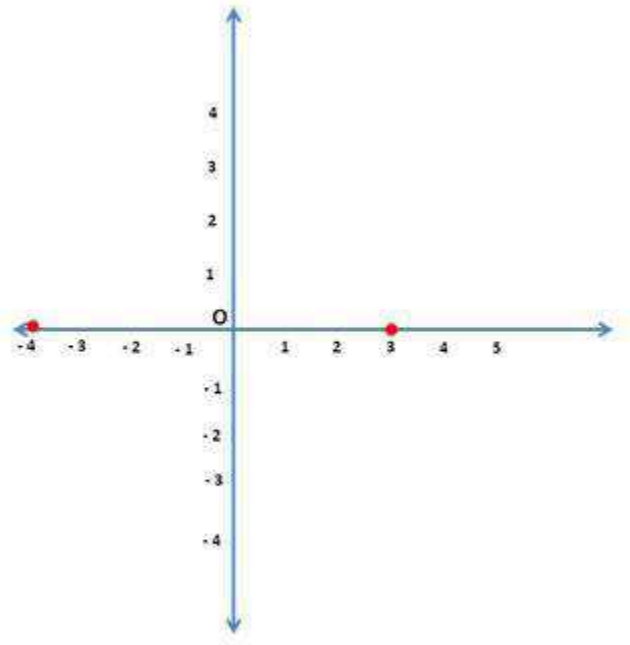
Marks (3)

Q 19 Find the value of x and y if:

(2x-3/2, 4y-7/2)=(5/2,3/2)

Marks (3)

Q 20 See figure, and write the following:



1) The points identified by the coordinates (1, 2) and (- 1, -2)
2) The coordinate of A, B, C and D.
3) Abscissa of point C.

Marks (3)

Q 21 Plot the points (*x*, *y*) given in the following table on the plane, choosing suitable units of distance on the axes:

X	-1	2	0	3	2
y	3	-5	-3	-3	1

Marks (3)

Q 22 What will be the position of point A(2, 1) if:

1) Abscissa is multiplied by -1?
2) Ordinate is multiplied by -2?
3) Point each coordinate is multiplied by -3?

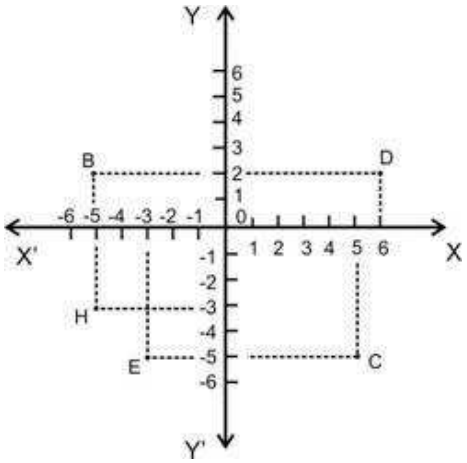
Marks (3)

Q 23 Plot the following points in a Cartesian plane:

(-2,4), (3,-1), (-1, 0), (1, 2) & (-3, -5)

Marks (4)

Q 24 Observe the fig. given below and answer the following:



(i) The coordinates of B.

(ii) The Coordinates of C.

(iii) The point identified by the coordinate (-3, -5).

(iv) The abscissa of the point D.

(v) The coordinates of H.

Marks (4)

Q 25 Determine the quadrants in which the following points lie;

(i) A (1,1)

(ii) B (2,4)

(iii) C (-3, -10)

(iv) D (-1,2)

(v) E (1,-1)

(vi) F (-2,-4)

(vii) G (-3, 10)

(viii) H (1,-2)

Marks (4)

Q 26 A car starts from the center of city and in each consecutive hour it covers a distance of 15km (along north), 5 km (along east), 15 km (along south) and 10 km (along west) respectively. Assuming the centre of city to be the origin, north-south direction is along y axis and west-east direction is along x axis; show the various position of the car on the Cartesian plane. Also, find how far is the car from x and y axis respectively at its final position.

Marks (4)

Q 27 See the figure, and write the following:

1) The coordinates of B.
2) The point identified by the point (-3, -5).
3) The abscissa of point D.
4) The ordinate of the point E.
5) The point identified by the coordinates (2, -4). (4 marks)

Marks (4)

Q 1 What is the name to the horizontal and vertical line in a coordinate system?

Q 2 The origin is indicated by what coordinates?

Q 3 How many Quadrants are there in the Cartesian Plane?

Q 4 In which Quadrant will the coordinates (-2,3) lie?

Q 5 in which Quadrant will the coordinates (-3, -4) lie?

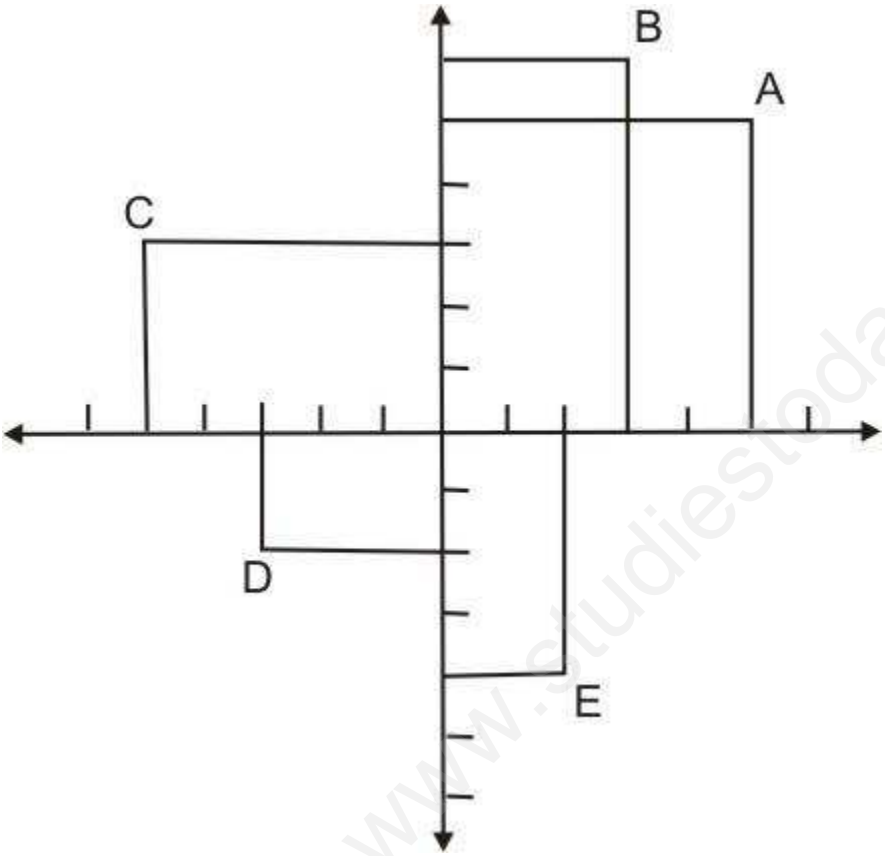
Q 6 What is the abscissa and the ordinate in the coordinates (3, -5)

Q 7 Write the abscissa and the ordinate of the coordinates of the points (0,3) (3,0) (0, 0).

Q 8 Plot the following point on the number line using a graph and join the points.

a) (3, -4) b) (-3, 2)

Q 9 Which coordinates do the following points indicate?



Q 10 Plot the following coordinates on the Cartesian system :

(2, 0), (-3, -4), (2, -2), (-4, 0), (-2, 3) and (1, 1.5).

Q 11 Define the following:

a) The Cartesian plane

b) The coordinate axes

c) The Origin.