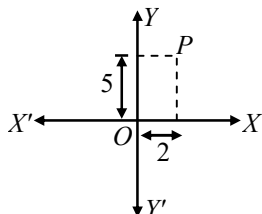


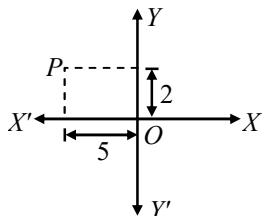
EXERCISE

A. Short Answer Type Questions

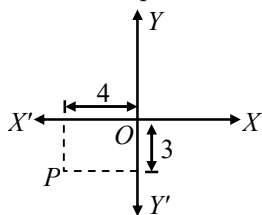
- Q.1** In the adjoining figure find
 (i) abscissa
 (ii) ordinate
 (iii) co-ordinates of point P.



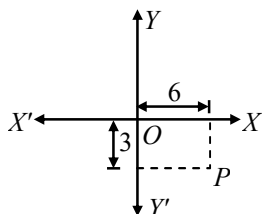
- Q.2** Determine
 (i) abscissa
 (ii) ordinate
 (iii) co-ordinate of point P in this given figure.



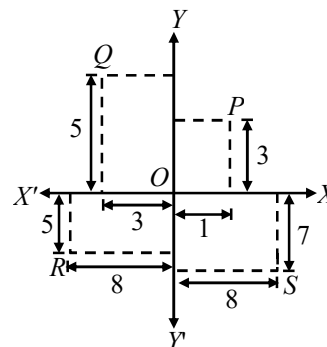
- Q.3** Determine
 (i) abscissa
 (ii) ordinate
 (iii) coordinates of point P, in the figure.



- Q.4** In the given figure find
 (i) abscissa
 (ii) ordinate
 (iii) co-ordinates of point P.



- Q.5** Write down
 (i) abscissa
 (ii) ordinates and
 (iii) co-ordinates of the points P, Q, R and S in the given figure.

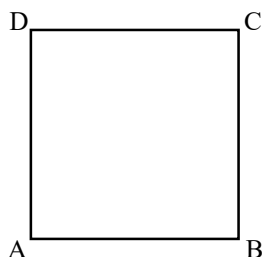


- Q.6** Draw X-axis and Y-axis and mark the point A (3, 9), B (4, -7), C (-8, 9), D (-3, -5), E (4, -2) and F (7, 5)
- Q.7** Draw a triangle PQR whose vertices are P = (1, -6), Q = (7, 4) and R = (-4, 4).
- Q.8** Draw a triangle ABC whose vertices A, B, and C are (-3, 0), (3, 3) and (-3, 3) respectively.
- Q.9** Draw a rectangle ABCD such that its vertices A, B, C and D are (4, 3), (4, -2), (-7, -2) and (-7, 3) respectively.
- Q.10** Draw a rectangle KLMN such that its vertices K, L, M, and N are (5, 0), (5, 3), (0, 3) and (0, 0) respectively.
- Q.11** Construct a square ABCD such that its vertices A, B, C, and D are (1, 2), (-7, 2), (-7, -6) and (1, -6) respectively.
- Q.12** Construct a square PQRS whose vertices P, Q, R and S are (0, 0), (-4, 0), (-4, -4) and (0, -4) respectively.
- Q.13** Draw a parallelogram ABCD whose vertices A, B, C, and D are (-4, 8), (-4, 2), (6, -7) and (6, -1) respectively.

Q.14 Construct a trapezium PQRS in which vertices P, Q, R and S are (3, 0), (7, 9), (− 6, 9) and (− 2, 0) respectively.

Q.15 Draw a rhombus ABCD whose vertices A, B, C and D are (1, 4.5), (− 1, 0), (1, − 4.5) and (3, 0) respectively

Q.16 Find the co-ordinates of the vertices of the square ABCD (side 2a)



- (i) Taking AB and AD as axis,
- (ii) Taking the centre of the square as origin and axes parallel to the sides AB, AD.

Q.17 Show that the points (− 4, − 1), (− 2, − 4), (4, 0) and (2, 3) are the vertices points of a rectangle.

Q.18 Show that the points A (1, − 2), B (3, 6), C (5, 10) and D (3, 2) are the vertices of a parallelogram.

Q.19 Prove that the points (2, 3), (− 4, − 6) and (1, 3/2) do not form a triangle

Q.20 Without plotting the given points on a graph paper indicate the quadrants in which they lie, if

- (a) ordinate = 6, abscissa = −3
- (b) ordinate = −6, abscissa = 4
- (c) abscissa = −5, ordinate = −7
- (d) ordinate = 3, abscissa = 5

Q.21 Plot the point P(−6, 3) on a graph paper. Draw $PL \perp x\text{-axis}$ and $PM \perp y\text{-axis}$. Write the coordinates of L and M.

Q.22 Plot the points A(−5, 2), B(3, −2), C(−4, −3) and D(6, 0) on a graph paper.

B. Long Answer Type Questions

Q.23 The three vertices of $\triangle ABC$ are A(1, 4), B(−2, 2) and C(3, 2). Plot these points on a graph paper and calculate the area of $\triangle ABC$.

Q.24 The three vertices of a rectangle ABCD are A(2, 2), B(−3, 2) and C(−3, 5). Plot these points on a graph paper and find the coordinates of D. Also, find the area of rectangle ABCD.

Q.25 The three vertices of a square ABCD are A(3, 2), B(−2, 2) and D(3, −3). Plot these points on a graph paper and hence, find the coordinates of C. Also, find the area of square ABCD.

C. Fill in the blanks type Questions

Q.26 The horizontal & the vertical lines drawn in the Cartesian plane to determine the position of a point are respectively, the.....and the.....

Q.27 The point of intersection of the x-axis and the y-axis in the Cartesian plane is

Q.28 The x-axis and the y-axis divide the Cartesian plane inquadrants

Q.29 The abscissa of a point on the y-axis is

Q.30 The ordinate of a point on the x-axis is.....

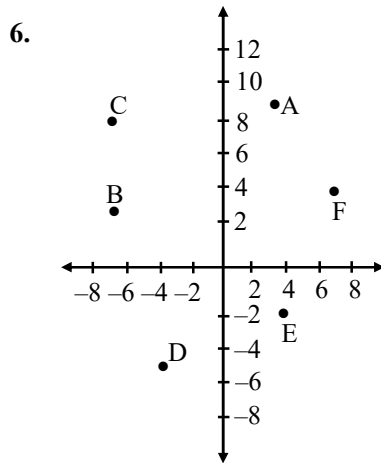
Q.31 If 'A' be point on the negative half of the x-axis such that the distance between A and the origin O is 5 units, then the coordinates of point A are

Q.32 If the perpendicular distance of a point P from the x-axis is 7 units along the negative direction of the y-axis then the ordinate of P is.....

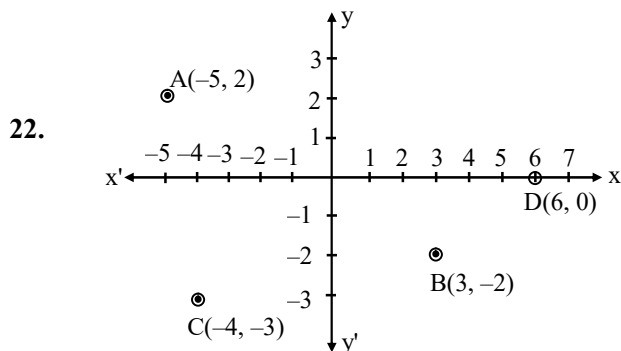
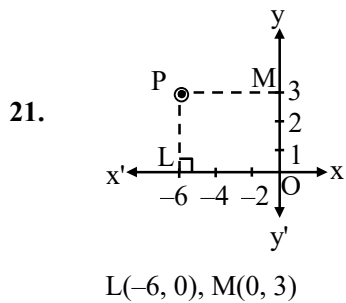
ANSWER KEY

A. SHORT ANSWER TYPE QUESTIONS:

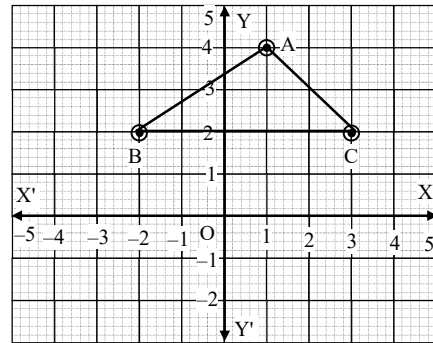
1. (i) 2 (ii) 5 (iii) (2, 5)
2. (i) -5 (ii) 2 (iii) (-5, 2)
3. (i) -4 (ii) -3 (iii) (-4, -3)
4. (i) 6 (ii) -3 (iii) (6, -3)
5. (i) 1, -3, -8, 8 (ii) 3, 5, -5, -7
(iii) P(1, 3), Q(-3, 5), R(-8, -5), S(8, -7)



16. (i) A(0, 0), B(2a, 0), C(2a, 2a), D(0, 2a)
(ii) A(-a, -a), B(a, -a), C(a, a), D(-a, a)
20. (a) II (b) IV (c) III (d) I



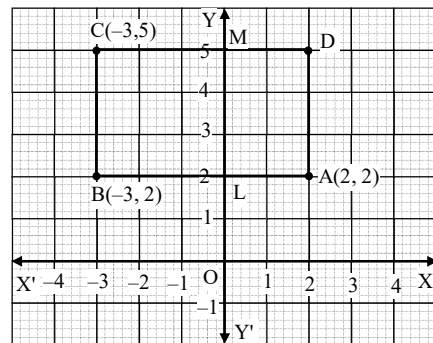
23.



Area = 5 sq. units.

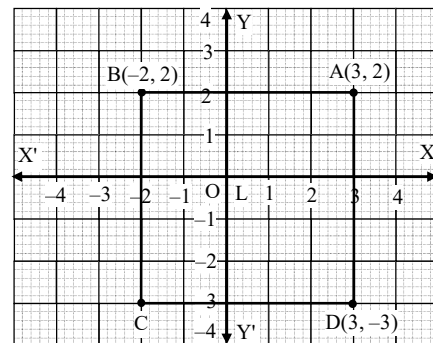
24.

D(2, 5), 15 sq units



25.

C(-2, -3), 25 sq units



26.

x-axis, y-axis

27.

Origin O

28.

4

29.

0

30.

0

31.

(-5, 0)

32.

-7