CBSE Test Paper 04

CH-3 Coordinate Geometry

1.	Which of the following point does not lie on the line $y=2x+3$?
	a. (-5, -7)
	b. (-1, 1)
	c. (3, 9)
	d. (3,7)
2.	The point (0, 9) lies
	a. on the positive direction of y-axis
	b. in quadrant III
	c. on the positive direction of x-axis
	d. in quadrant IV
3.	The points A(-2,3), B(-2,-4) and C(5,-4) are the vertices of the square ABCD, then the co-
	ordinates of the vertex D are:
	a. (5,3)
	b. (3, 3)
	c. (0,0)
	d. (3, -4)
4.	The point whose ordinate is 6 and which point lies on the y-axis?
	a. (0, 6)
	b. (6, 6)
	c. none of these
	d. (6, 0)
5.	The points in which the abscissa and the ordinate have different signs will lie in
	a. quadrant IV only
	b. quadrants I and III
	c. quadrants II and IV
	d. quadrant II only
6.	Fill in the blanks:

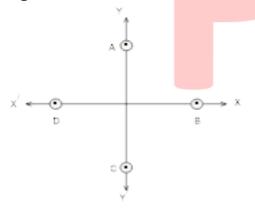
A point lie on____quadrant, whose both coordinates are negative.

7. Fill in the blanks:

The x-coordinate is also called the _____.

8. Without plotting the points indicate the quadrant in which they will lie, if abscissa is -5 and ordinate is -3.

- 9. Write the Co-ordinates of a point which lies on the x-axis and is at a distance of 4 units to the right of origin. Draw its graph.
- 10. Draw the graph of the equation: y = 3
- 11. Which of the following points lie on the y-axis? A(1, 1), B(3, 0), C(0, 3), D(0, 0), E(-5, 0), F(0, -1), G(9, 0), H(0, -8).
- 12. Which of the following points lie on the x-axis? A(1, 1), B(3, 0), C(0, 3), D(0, 0), E(-5, 0), F(0, -1), G(9, 0), H(0, -8).
- 13. In fig. write the Co-ordinates of the points and if we join the points write the name of fig. formed. Also write Co-ordinate of intersection point of AC and BD.



- 14. Three vertices of a square are A(-1, -9), B(3, -1) and C(-5, 3). Plot the points. Then find the co-ordinates of the missing vertex D.
- 15. Plot the points P (1, 0), Q (4, 0) and S (1, 3). Find the coordinates of the point R such that PQRS is a square.

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Solution

1. (d) (3,7)

Explanation: Let us put x=3 in the give equation,

Then, y=2(3)+3

y=6+3=9

So, the point will be (3,9)

For x=3, y=9. But in the given option, y=7

So, the given point (3,7) will not lie on the line y=2x+3.

2. (a) on the positive direction of y-axis

Explanation: Any point P in co-ordinate plane is written as P(x,y)

when the value of x-coordinate is equal to zero then the point P lies on y axis

Since, here x=0 so, point lies on y-axis

And the value of y is positive so,

Points lies in the positive direction of y-axis

3. (a) (5, 3)

Explanation:

Let A(-2,3), B(-2,4), C(5,-4) be the three vertices of the square ABCD.

Clearly, abscissa of D = abscissa of C = 5

And, ordinate of D = ordinate of A = 3

So, the coordinates of the 4th vertex of ABCD i.e. D are (5,3).

4. (a) (0, 6)

Explanation:

Since the ordinate or y-corrdinate of a point is 6 and this point lies on y-axis.

And the abscissa or x-corrdinate of a point lying on y-axis is 0.

Therefore, the coordinate of the point is (0,6).

5. (c) quadrants II and IV

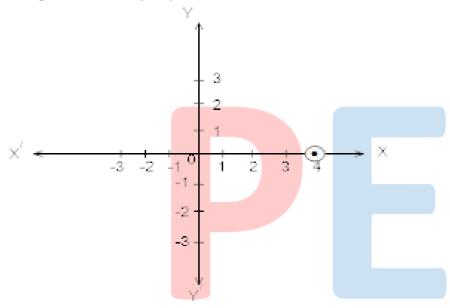
Explanation:

In 2nd quadrant and 4th quadrant sign of abscissa and ordinate both is opposite i.e, one is negative and other is positive.

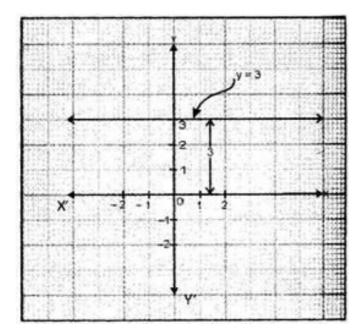
In 2nd quadrant sign of co-ordinate are (—,+),
And in 4th quadrant sign of co-ordinate are (+,—)

- 6. IIIrd
- 7. abscissa
- 8. In the point (-5, -3) abscissa and ordinate both are negative, so it lies in the third quadrant.

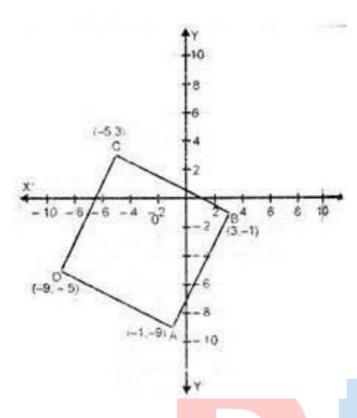
9. The point will be (4, 0).



10. Given equation is y = 3. The value of y is constant, therefore the graph of y = 3 is a straight line parallel to x-axis (horizontal line) at a distance of 3 units above the x-axis.

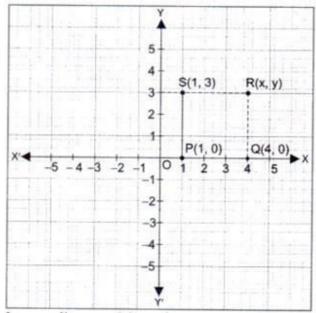


- 11. A point lies on y-axis if x-coordinate is zero. Hence C, D, F and H points lie on y-axis.
- 12. A point lies on x-axis if the y-coordinate is zero. Hence B, D, E and G points lie on the x-axis.
- 13. i. The Co-ordinate of point A is (0, 2), B is (2, 0), C is (0, -2) and D is (-2, 0).
 - ii. If we joined them we get square.
 - iii. Co-ordinate of intersection point of AC and BD is (0, 0).
- 14. Plot the points A, B and C. Join AB and BC. Since each angle of a square is 90°. Hence, to complete the square draw perpendicular at A and C. The intersecting point of these perpendiculars is D. The coordinates of D are (-9, -5).



15. Plot the points P(1, 0), Q(4, 0) and S(1,3) in the cartesian plane. As we know all the sides of a square are equal and each angle is of 90° measure.

Therefore, the abscissa of the vertex R is 4 and its ordinate is 3.



Hence, the coordinate of the point R are (4, 3).