CO-ORDINATE GEOMETRY

CLASS IX (2025-26)

1   A policeman and a thief are equidistant from the jewel box. Upon considering jewel box as origin, the position of policeman is (0, 5). If the ordinate of the position of thief is zero, then write the coordinates of the position of thief

2   Write two points lying on the *x*-axis, which are at equal distances from the origin

3   In which quadrant, the points P(2, – 3) and Q(– 3, 2) lie?

4   Find the perpendicular distance of the point P(5, 7) from the *y*-axis.

5   The point P(*a*, *b*) lies in the IVth quadrant. Which is greater: *a* or *b*?

6   Write the coordinate of a point whose abscissa is – 7 and ordinate is 2.

7   What is the sign of *x*-coordinate of a point lying in third quadrant?

8   Which of the following points lies on the *x*-axis?
    A (0, 4),   B(1, 0),   C(0, – 7) and D(– 5, 0)

9   If a point lies on the *y*-axis, then what will be its abscissa?

10 If the perpendicular distance of a point A from the *x*-axis is 6 units and foot of perpendicular lies on the negative direction of the *x*-axis, then write the ordinate of point A.

11 Which whole number represents the *y*-coordinate of any point lying on the *x*-axis?

12 Which of the following points lies on the *x*-axis and which on the *y*-axis?
    A(0, 2),   B(5, 6),   C(– 3, 0),   D(0, – 3),   E(0, 4),   F(6, 0),   G(3, 0)

13 In which quadrant, will the point lies, if
    (i) the ordinate is 2 and the abscissa is – 3
    (ii) the abscissa is – 4 and the ordinate is – 2
    (iii) the ordinate is – 3 and the abscissa is 4
    (iv) the ordinate is 3 and the abscissa is – 2

14 If the coordinates of two points are P(–2, 3) and Q(–3, 5), then find (abscissa of P) – (abscissa of Q).
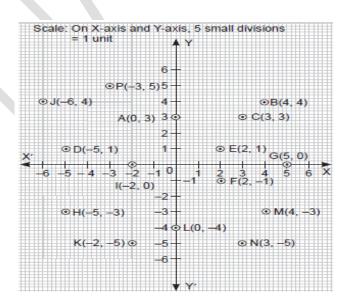   ANS: The abscissa (*x*-coordinate) of point P is (–2) and that of Q is (–3).
    (Abscissa of P) – (abscissa of Q) = (–2) – (–3) = –2 + 3 = 1 unit.

15 Find the distance of the following points from the *y*-axis: P(3, 0), Q(0, –3), R(22, –5), S(–3, –1).

16 Find the coordinates of a point:
    (i) whose ordinate is 6 and lies on the *y*-axis
    (ii) whose abscissa is –3 and lies on the *x*-axis.

17 Write abscissa of the following points: (4, 0), (5, 23), (23, 4) and (0, 24).

18 In which quadrant the following points lie?
    (3, 2), (2, –3), (–4, 4) and (–2, –3)

19 Write the equation of the *x*-axis, the *y*-axis and the coordinates of the point where these two coordinate axes intersect each other.

20 In which quadrant, will the point lies, if
    (i) the ordinate is 2 and the abscissa is – 3
    (ii) the abscissa is – 4 and the ordinate is – 2.

21 If the perpendicular distance of a point A from the *x*-axis is 6 units and foot of perpendicular lies on the negative direction of the *x*-axis, then write the ordinate of point A.

22 A point both of whose coordinates are negative will lie in _____quadrant.

23 (-2, 0) lies on the _____
    (A) y- axis   (B) x- axis   (C) y = x   (D) x + y = 0
24 The points whose abscissa and ordinate have different signs will lie in ____ and ____ quadrants.
25 Points (other than origin) for which abscissa is equal to the
    ordinate will lie in
    A) I quadrant only B) I and II quadrants   C) I and III quadrants   D) II and IV quadrants
26 Signs of the abscissa and ordinate of a point in the second quadrant are respectively
    i) +, +   ii) –, –   iii) –, +   iv) +, –
27 The point (– 10, 0) lies
    A) on the x –axis   B) in the second quadrant C) on the y-axis   D) in the fourth quadrant
28 Abscissa of all the points on the y - axis is__
    A) 0   B) 1   C) 2   D) any number
29 A point both of whose coordinates are negative will lie in
    A) I quadrant   B) II quadrant   C) III quadrant   D) IV quadrant
30 The perpendicular distance of the point P (3, 4) from the y-axis is _____

31 In which quadrant does the point $(-3 + \sqrt{5}, -3 - \sqrt{5})$ lie?
32 If the coordinates of two points P and Q are $(-2, 3)$ and $(-6, 5)$, then the value of
    $(y - coordinate\ of\ Q) - (x - coordinate\ of\ Q)$ is _____.
33 A point both of whose coordinates are negative will lie in _____quadrant.
34
    From the figure, answer the following:
    (i) write the points whose abscissa is 0.
    (ii) write the points whose ordinate is 0.
    (iii) write the points whose abscissa is –5.

Scale: On X-axis and Y-axis, 5 small divisions = 1 unit

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