



### MATHS

## BOOKS - CBSE COMPLEMENTARY MATERIAL MATHS (HINGLISH)

## **CO-ORDINATE GEOMETRY**

Exercise Part A

1. The abscissa of a point is the distance of the

point from

A. x-axis

B. y-axis

C. origin

D. None of these

Answer: B

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2. The y-coordinate of a point is the distance

of that point from

A. x-axis

B. y-axis

C. origin

D. None of these

Answer: A

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**3.** If both the coordinates of a point are negative then that point will lie in

- A. First quadrant
- B. Second quadrant
- C. Third quadrant
- D. Fourth quadrant

Answer: C



4. If abscissa of a point is zero then that point

will lie

A. on x-axis

B. on y-axis

C. at origin

D. in 1st quadrant

**Answer: B** 

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5. If x>0 and y<0, then the point (x, -y) lies

in

A. I quadrant

B. II quadrant

C. III quadrant

D. IV quadrant

Answer: A

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6. Point (a, o) lies

A. on x-axis

B. on y-axis

C. in third quadrant

D. in fourth quadrant

Answer: A

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**7.** of abscissa and ordinate of a point in the fourth quadrant are respectively.

C.-, +

D.+, -

#### Answer: D

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8. Ordinate of a point is positive in

A. I and IV quadrants

B.1 quadrant only

C. I and II quadrants

D. 1 and III quadrants

#### Answer: C



9. The point which lies on y-axis at a distance

of 10 units in the negative direction of y-axis is

A. (10,0)

#### B. (0,10)

C. (-10,0)

D. (0,-10)

#### Answer: D



**10.** The point whose abscissa and ordinate have different signs will lie in

A. I and II quadrants

B. I and III quadrants

C. II and III quadrants

D. II and IV quadrant

#### Answer: D

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**11.** Which of the points P(0,3), Q(1,0), R(0,-1),S(-5,0) and T(1,2) do not lie on the X-axis ?

A. P and R only

B. Q and S only

C. P, R and T

D. Q, S and T

#### Answer: C

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**12.** If the coordinates of the two points are P(-2,3) and Q(-3,5), then (Abscissa of P)-(Abscissa of Q) is

A.-5

B. 1

 $\mathsf{C}.-1$ 

 $\mathsf{D}.-2$ 

#### **Answer: B**

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Point

 $(1,1),\,(1,\ -1),\,(\ -1,\,1),\,(\ -1,\ -1)$ 

A. lie in I quadrant

B. lie in III quadrant

C. lie in I and III quadrants

D. do not lie in the same quadrant

Answer: D

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14. The point of intersect of the coordinatesaxes is: ordinate (b) abscissa quadrant origin(d) origin

- A. Abscissa
- B. Ordinate
- C. Quadrant
- D. Origin

Answer: D



15. The abscissa and ordinate of the origin are

(0, 0) (b) (1, 0) (c) 0, 1) (d) 1, 1)

A. 1, 0

B. 1, 1

C.0, 1

D.0, 0

Answer: D

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16. The measure of the angle between the coordinate axes is  $0^0$  (b)  $90^0$  (c)  $180^0$  (d)  $360^0$ 

A.  $0^{\circ}$ 

B.  $90^{\circ}$ 

C.  $180^{\circ}$ 

D.  $270^{\,\circ}$ 

Answer: B



**17.** The perpendicular distance of the point p(-

4, -3) from x-axis is

B. −3 C. 4

A. - 4

D. 3

Answer: D



**18.** The perpendicular distance of the point p(-7,2) from y-axis is

A.-7

 $\mathsf{B.}\,7$ 

 $\mathsf{C.}\,2$ 

D. None of these

Answer: B

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19. The distance of the point p(3,4) from the

origin is

A. 3

B. 4

C. 7

D. 5

Answer: D



**20.** Which of the points A(-5, 0), B(0, -3), C(3, 0),

D(0,4) are closer to the origin ?

A. A

**B.** B

C. D

D. Points B and C both

Answer: D

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21. The point whose abscissa is 5 and which lie

on x-axis is\_\_\_\_\_.



22. x-coordinate of a point is its distance from

the x-axis.



#### 23. The co-ordinates of a point describe the

point in the place uniquely.

24. The points with coordinates (3,4) and (4,3)

are at same position of the plane.



# **25.** Y-coordinate of a point is also called abscissa.



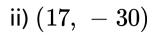
**26.** The coordinates of a points, which lies on negative x-axis at a distance of 6 units from y-axis, are (-6,0).



#### 27. In which quadrant do the given points lie.

i) (3, -2)

28. In which quadrant do the given points lie.



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29. In which quadrant do the given points lie. iii) (-2,5)

**30.** In which quadrant do the given points lie.

iv) 
$$(-50, -20)$$

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**31.** In which quadrant do the given points lie.v) (10, 100)



32. In which quadrant do the given points lie.

vi)  $(\,-\,18,\,80)$ 

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#### **33.** On which axis do the given points lie:

i) (11, 0)

34. On which axis do the given points lie:

ii) (-11,0)

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**35.** On which axis do the given points lie:

iii) (0, 14)

**36.** On which axis do the given points lie:

(iv) (0, -100)

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**37.** The abscissa and ordinate of a pointAare-3and-5 respectively then write down the coordinate of A.

38. Is P(7,0) and Q (0,7) represent the same point ?
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#### **39.** In which quadrant x coordinate is negative

#### ?



40. Name the figure formed when we plot the

points (0, 0), (4,4) and (0,4) on a graph paper.

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**41.** In which quadrant, does the point A (x, y)

with values x>0 and y>0 exists.



42. Write the coordinates os the fourth vertex

of a square when three of its vertices are given

by (1,2) (5,2) (5, -2).



#### **43.** If abscissa of point A is positive & ordinate

is negative then in which quadrant do A lie?



**44.** Write the coordinates of a point whose perpendicular distance from x-axis is 5 units & perpendicular distance from y-axis is 3 & it lies in II quadrant.

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45. Draw the Cartesian plane on a graph paper

and plot the given points.

i) A(3,5)

**46.** Draw the Cartesian plane on a graph paper and plot the given points.

ii)  $B(\,-7/2,0)$ 

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47. Draw the Cartesian plane on a graph paper

and plot the given points.

iii) C(2, -6)

48. Draw the Cartesian plane on a graph paper

and plot the given points.

(iv) D(-6, -4)

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49. Draw the Cartesian plane on a graph paper

and plot the given points.

E(0, -5/2)

50. Draw the Cartesian plane on a graph paper

and plot the given points.

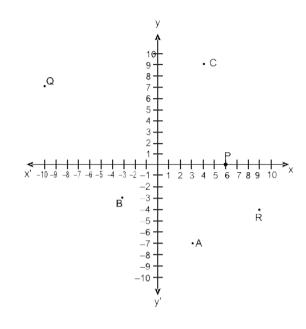
F(8,0)

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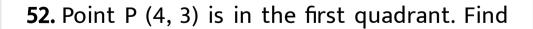
#### 51. Write the coordinates of each of points in

the given figure.

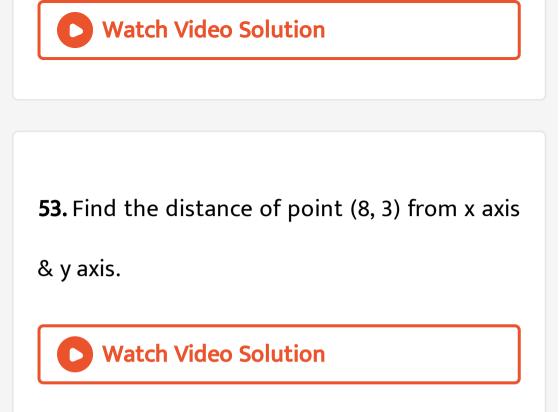
#### A, B, C, P, Q, R







the coordinate of the point Q, opposite to P in fourth quadrant.



**54.** Write the name of the figure formed by joining the points A (-3, 0), B (0, 3) and C (3, 0) in the cartesian plane.

**55.** Write the coordinates of the point that lies on y-axis and is at a distance of 2 units in upward direction.

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**56.** If the mirror image of a point (x, y) about xaxis is (x, -y) then write the mirror image of the point S (-5, 7) about x-axis is.

57. Find the distance of the point P (4, 2) from

origin.

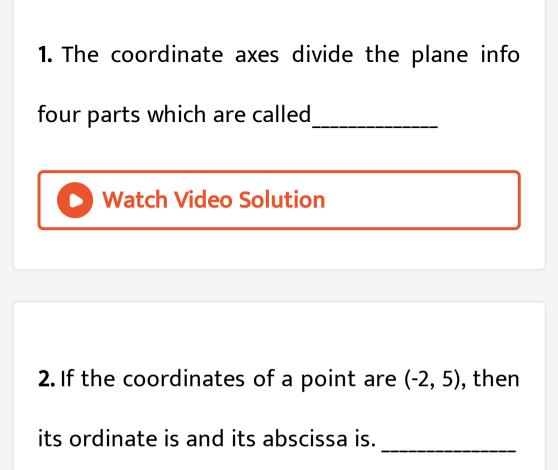
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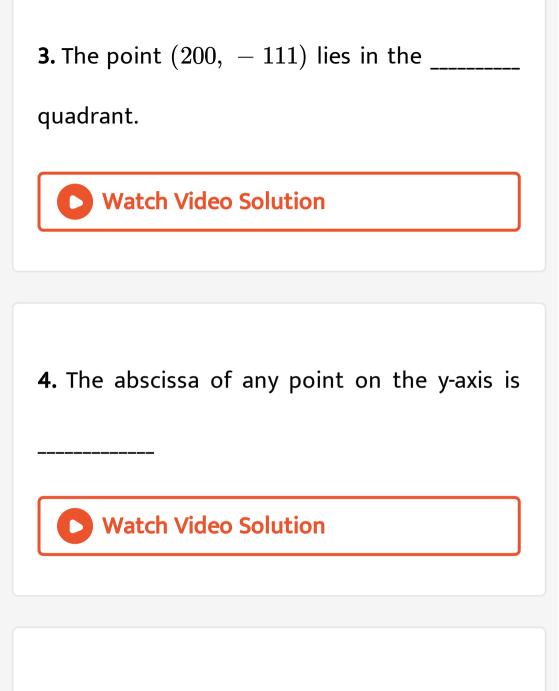
### 58. Write the mirror image of (4, -3) about y-

axis.

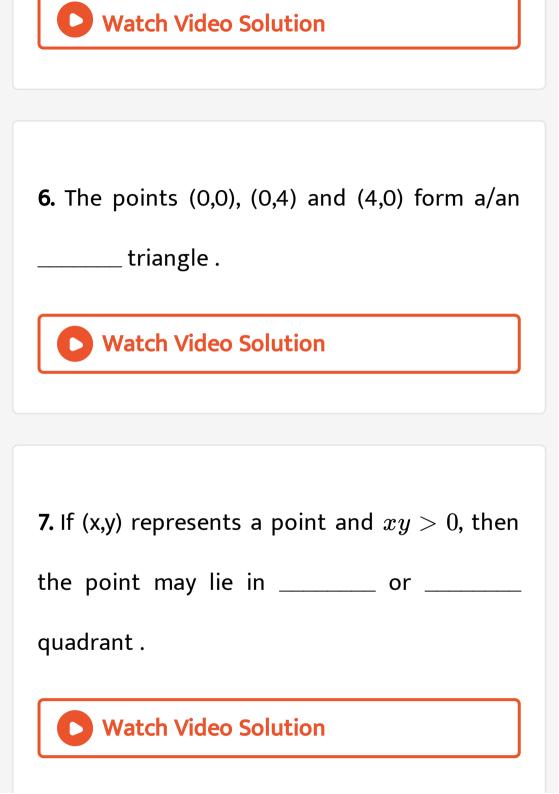
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Exercise Part A Fill In The Blanks





5. The ordinate of every point on the x-axis is



8. The points with coordinates (3, -1) and (-1, 3) are at \_\_\_\_\_ (same/different) positions of the coordinate plane.

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- 9. If the ordinate of points 7 and abscissa is
- -5, then its coordinates are \_\_\_\_\_

 Draw a line segment on a graph paper whose end points lies in first quadrant and third quadrant. Write the coordinates of its end points and mid point of line segment.



2. Plot the points A (2, 4) & B (2, -5) whose x-

coordinates are same. Is this line AB parallel to

any of the axes. If yes, to which axis is it

parallel?



3. Plot the points P (2, -3) & Q (-5, -3) whose

ordinates are same. To which axis the line P Q

is parallel?



**4.** Plot the points A (7, 6) & B (7, -6) on graph

paper. Join them & answer the following :

(i) Write the coordinate of the point where

line AB cuts the x-axis?



5. Plot the points A (7, 6) & B (7, -6) on graph

paper. Join them & answer the following :

(ii) To which axis, line AB is parallel ?



6. Draw a triangle ABC on graph paper having the coordinates of its vertices as A (-2, 0), B (4, 0) and C (1,5). Also find the area of triangle.



7. If we plot the points P(5, 0), Q (5, 5), R(-5, 5)

and S (-5, 0), which figure will we get? Name

the axis of symmetry of this figure?

8. Find the coordinates of a point which is equidistant from the two points (-4, 0) and (4, 0). How many of such points are possible satisfying the condition?

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**9.** Draw a quadrilateral with vertices A (4, 3), B(-4, 3), C(-4, -3) and D(4, -3). Draw its diagonals and write the coordinates of the point where the diagonals cut each other?



**10.** A rectangular field is of length 10 units & breadth 8 units. One of its vertex lie on the origin. The longer side is along x-axis and one of its vertices lie in first quadrant. Find all the vertices.

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**11.** Plot the point B (5, 3), E(5, 1), S(0, 1) and T(0,

3) and answer the following:

i) Join the points and name the figure

obtained.



- **12.** Plot the point B (5, 3), E(5, 1), S(0, 1) and T(0,
- 3) and answer the following:
- ii) Find the area of figure.



### **Practice Test**

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



2. Write the y-coordinate of a point which lies

on x-axis.



**3.** Find the value of x and y if:

(a) 
$$(x-4,7)=(4,7)$$

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**4.** Find the value of x and y if:

(b) 
$$(1,2y-3)=(1,7)$$

5. What is the distance of a point (7, 6) from x-

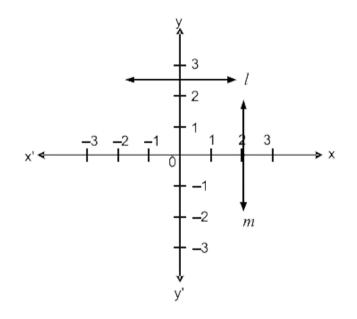
axis and y-axis ?

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6. Plot the following points in Cartesian plane.

$$(\,-3,\,5),\,(\,-2,\,0),\,(\,-4,\,0)$$

7. Write the equations of line l and m as shown in the figure. Also name the line which is represented by x = 0.



8. There are three points O(0, 0), A(4, 0) and C(0, 6). Find the coordinates of the fourth point B such that OABC forms a rectangle.

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**9.** The base AB of two equilateral triangles ABC and ABC' with side 2a lies along the X-axis such that the mid-point of AB is at the origin as shown in Fig. 14.4. Find the

coordinates of the vertices C and C' of the

triangles. (FIGURE)