



INDIAN SCHOOL AL WADI AL KABIR

Class IX, Mathematics

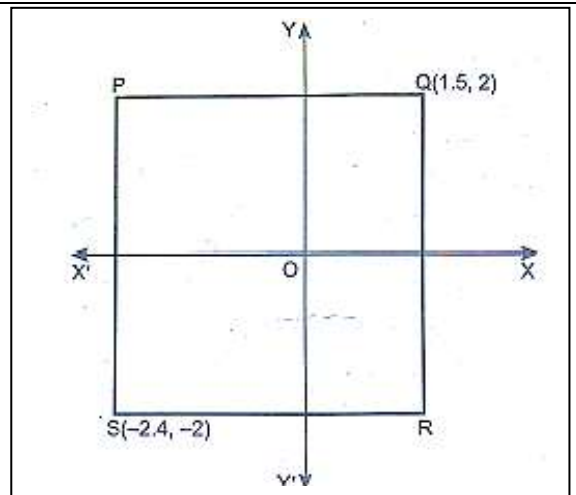
Worksheet-Coordinate Geometry

26 – 08 - 2023

Q. No.	SECTION A							
	Section A consists of 12 Questions of 1 Mark each.							
1.	Find the perpendicular distance of a point P(-5, 3) from y –axis .							
	A	3 units	B	-5 units	C	5 units	D	2 units
2.	The point which lies on y-axis at a distance of 5 units in the negative direction of y-axis is:							
	A	(0, 5)	B	(0, -5)	C	(5, 0)	D	(-5, 0)
3.	If the perpendicular distance of a point from X- axis is 7 units and foot of the perpendicular lies on the negative direction of X- axis, then the point has:(CFQ)							
	A	abscissa is -7	B	ordinate is 7 only	C	ordinate is -7 only	D	ordinate is 7 or -7
4.	In which quadrant will the point lie if the ordinate is 2 and abscissa is -3.							
	A	I	B	II	C	III	D	IV
5.	If the coordinates of two points are P(-2, 3) and Q(-3, 5), find abscissa of P minus abscissa of Q.							
	A	1 unit	B	5 units	C	2 units	D	6 units
6.	On plotting the points O (0, 0), A (3, 0), B (3, 4), C (0, 4) and joining OA, AB, BC and CO which of the following figure is obtained?(CFQ)							
	A	Square	B	Rectangle	C	Trapezium	D	Rhombus
7.	Amit’s school is 5 km to the west and 3 km north of his house. He represented his house and his school on a coordinate grid, with his house located at the origin, and the positive x axis represent the direction that is east of his house. If 1 unit on the coordinated grid represents 1 km, what will be the coordinate of his school?(CFQ)							
	A	(5, 3)	B	(3, 5)	C	(-5, 3)	D	(-3, 5)

8.	Point $(-10, 0)$ lies:							
	A	on the negative direction of the x -axis			B	on the negative direction of the y -axis		
	C	in the third quadrant			D	in the fourth quadrant		
9	The points $(-5, 2)$ and $(2, -5)$ lie in the							
	A	same quadrant			B	II and III quadrants, respectively		
	C	IV and II quadrants, respectively			D	II and IV quadrants, respectively		
10.	If P $(-1, 1)$, Q $(3, -4)$, R $(1, -1)$, S $(-2, -3)$ and T $(-4, 4)$ are plotted on the graph paper, then the point(s) in the fourth quadrant are:							
	A	P and T	B	Q and R	C	Only S	D	P and R
	<p>DIRECTION: In the question number 11 and 12, a statement of assertion (A) is followed by statement of Reason (R). Choose the correct option</p> <p>(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)</p> <p>(b) Both assertion (A) and reason (R) are true and reason (R) is not the correct explanation of assertion (A)</p> <p>(c) Assertion (A) is true but reason (R) is false.</p> <p>(d) Assertion (A) is false but reason (R) is true.</p>							
11.	<p>Assertion: The points $(-3, 5)$ and $(5, -3)$ are at different positions in the coordinate plane.</p> <p>Reason: If $x \neq y$, then $(x, y) \neq (y, x)$.</p>							
12.	<p>Assertion: The point $(-5, 0)$ lies on y-axis and $(0, -4)$ lies on x-axis.</p> <p>Reason: Every point on the x-axis has zero distance from x-axis and every point on the y-axis has zero distance from y-axis.</p>							

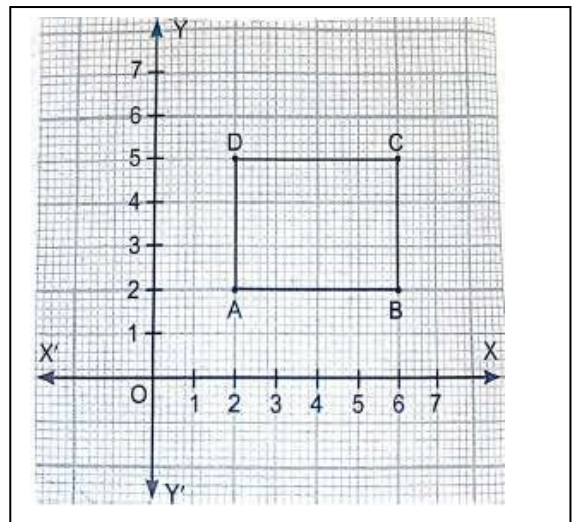
19. In the given figure, PQRS is a rectangle. Find the
(i) sides of the rectangle (ii) coordinates of points P and R. (CFQ)



Question of 5 marks

20. For a group activity of class IX A the teacher divided the space as Cartesian plane and chairs are placed at various points for the group of 4 students at points A, B, C and D.(CFQ)

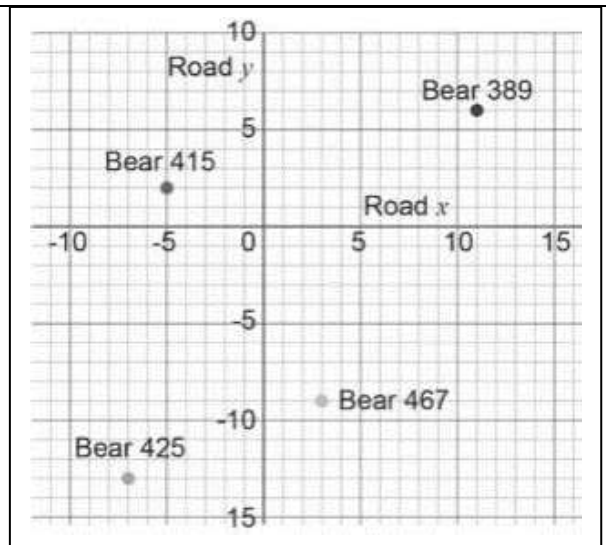
- (1) What is common in points A and D?
- (2) What is common in points A and B.
- (3) Find the area of rectangle ABCD?
- (4) What is the distance of point A to B?
- (5) Write the coordinate of point C.



Question of 4 marks

21. Case Study Based:

A forest ranger keeps track of bears in his area. He plotted their location on a graph. The origin represents the ranger's control room's location. To access and maintain equipment, Road x and Road y have been laid and paved inside the forest. They pass through the control room. One unit on the graph paper represents 1 km.



21	I	Which bear is nearest to a paved road?
	II	Bear 467 has been injured. The forest rescue team starts from the control room and decides to use the paved road as much as possible. Which road should they take?
	III	How far is Bear 425 from Road x? OR A tiger is at (11, 4). How far from it is the nearest bear?
	IV	In the forest, rain shelters are at an interval of 2 km along paved roads. A forest ranger is travelling on Road x. He crosses a rain shelter located at (3, 0). What is likely to be the location of the next shelter?
	V	The control room receives a message about trespassers located at (-9, -8). The trespassers were seen moving towards Road x on foot. The ranger immediately dispatches a team of guards in a jeep towards them. The guards encounter the trespassers before crossing the road x. Which of the following is most likely to be the location of the encounter? (-9, -14), (-9, -5), (-9, 4), (9, 5)

Answers

Answers	1	C	2	B	3	C	4	B
	5	A	6	B	7	C	8	A
	9	D	10	B	11	a	12	d
	13	(5, 0) or (-5, 0)	14	II, IV, X axis, I, III	15	I Quadrant	16	1. $x=2, y=5$ 2. $x=2, y=5$
	17	(4, 0), 0, -2, E	18	(6, 0), (0, -4), (5, 0), (0, 3), (0, -8), (2, 0)	19	1. 3.9 units, 4 units 2. P(-2.4, 2) R(1.5, -2)	20	(1) abscissa is 2 (2) ordinate is 2 (3) 12 sq. units (4) 4 units (5) (6, 5)
	20	(I) Bear 415 (II) y (III) 13km OR 2km (IV) (5, 0) or (1, 0) (V) (-9, -5)						