1. The coordinate of A in the below graph is

$$(a) (-7, 3)$$

(b)
$$(7, -7)$$

$$(c)(-6,-1)$$

$$(d)(2,-3)$$

2. The coordinate of B in the below graph is

(a)
$$(-7, 3)$$

(b)
$$(7, -7)$$

$$(c)(-6,-1)$$

$$(d)(2,-3)$$

3. The coordinate of C in the below graph is

$$(a) (-7, 3)$$

(b)
$$(7, -7)$$

$$(c)(-6,-1)$$

$$(d)(2,-3)$$

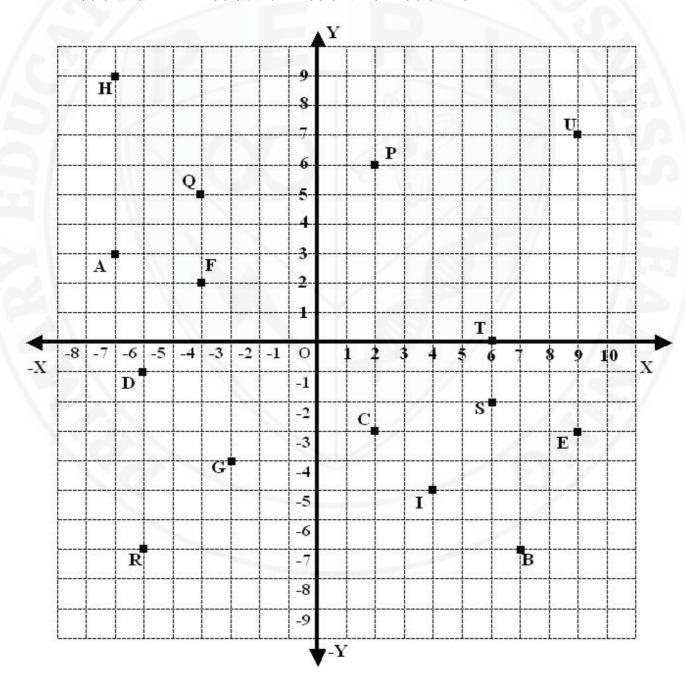
4. The coordinate of D in the below graph is

$$(a) (-7, 3)$$

(b)
$$(7, -7)$$

$$(c) (-6, -1)$$

(c)
$$(-6, -1)$$
 (d) $(2, -3)$



5.	The coordinate of E in the (a) $(9, -3)$			(d) (–7, 9)
6.	The coordinate of F in the (a) $(9, -3)$			(d) (–7, 9)
7.	The coordinate of G in t (a) $(9, -3)$			(d) (–7, 9)
8.	The coordinate of H in t (a) $(9, -3)$			(d) (-7, 9)
9.	The coordinate of P in the (a) (2, 6)			(d) (6, 0)
10.	The coordinate of S in the (a) (2, 6)	the given graph in $(b) (-6, -7)$		(d) (6, 0)
11.	The coordinate of R in to (a) (2, 6)			(d) (6, 0)
12.	The coordinate of T in the (a) (2, 6)			(d) (6, 0)
13	The coordinate of U in t (a) (9, 7)	he given graph	is	(d) none of these

14. The coordinate of I in the given graph is

15. The coordinate of Q in the given graph is

(b) (-4, 5)

(b) (-4, 5)

(a) (9, 7)

(a) (9, 7)

(c)(4,-5)

(c) (4, -5)

(d) none of these

(d) none of these



INTRODUCTION TO GRAPH

MATHEMATICS

8th CBSE

1.	•	of a point is zero, then (b) II quadrant	•	(d) y – axis
2.		of a point is zero, then (b) II quadrant	- ·	(d) y – axis
3.	Point (-6, 4) lies (a) I (b) II	in the quadrant: (c) III	(d) IV	
4.	The point $(-4, -3)$ (a) $x = -4$, $y = -3$) means: (b) $x = -3$, $y = -4$	(c) $x = 4$, $y = 3$	(d) None of these
5.	Point (0, 4) lies of (a) I quadrant	n the: (b) II quadrant	(c) x – axis	(d) y – axis
6.	Point (5, 0) lies of (a) I quadrant	n the: (b) II quadrant	(c) x – axis	(d) y – axis
7.		(0, 0), (0, 2), (2,2) and (b) Rectangle		(d) Parallelogram
8.	Point (-2, 3) lies : (a) I quadrant		(c) III quadrant	(d) IV quadrant
9.	Point (0, -2) lies: (a) on the x-axis	(b) in the II quadrant	(c) on the y-axis	(d) in the IV quadrant
10.	Abscissa of the al (a) 0 (b) 1	1 the points on $x - axis$ $(c) -1$	is: (d) any number	
11.	Ordinate of the al (a) 0 (b) 1	the points on $x - axis$ (c) -1	is: (d) any number	
12.	Abscissa of the al (a) 0 (b) 1	1 the points on $y - axis$ (c) -1	is: (d) any number	
13.	Ordinate of the al (a) 0 (b) 1	the points on $y - axis$ (c) -1	is: (d) any number	
14.	-	ordinate is 4 and which 4) (c) (1, 4)	lies on y – axis is: (d) (4, 2)	
15.	The perpendicular (a) 3 (b) 4	r distance of the point I (c) 5	P(3,4) from the y – axis (d) 7	s is:

1. Which of the following points lie in I and II quadrants?

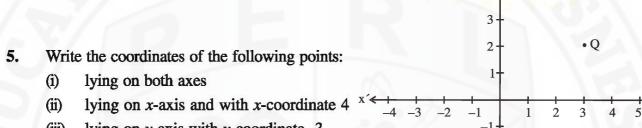
$$(1, 1), (2, -3), (-2, 3), (-1, 1), (-3, -2), (4, 3)$$

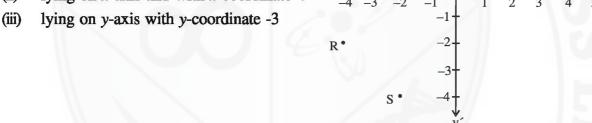
2. Which of the following points lie on (a) x-axis (b) y-axis?

(5, 1), (8, 0), (0, 4), (-3, 0), (0, -3), (0, 5), (0, 0)

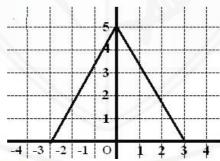
3. If the x-coordinate of a point is negative, it can lie in which quadrants?

4. From the figure, write the coordinates of the points P, Q, R and S. Does the line joining P and Q pass through origin?





- 6. The coordinates of the three vertices of a rectangle ABCD are A(3, 2), B (-4, 2), C(-4, 5). Plot these points and write the coordinates of D.
- 7. ABC is an equilateral triangle as shown in the figure. Find the coordinates of its vertices



8. Plot the following points on a graph paper:

x	1	2	3	4	5
у	5	8	11	14	17

Join these points. What do you observe?

9. What is the name of horizontal and the vertical lines drawn to determine the position of any point in the Cartesian plane?

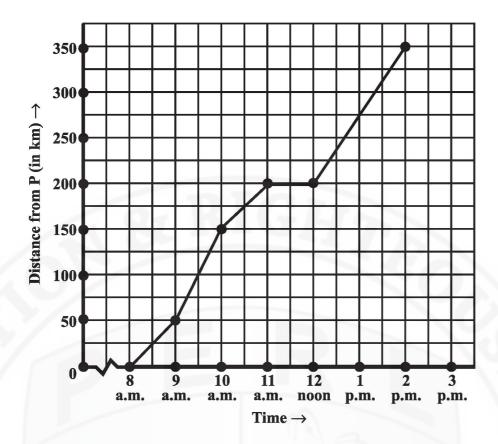
- **10.** What is the name of each part of the plane formed by these two lines?
- 11. Write the name of the point where these two lines intersect.
- **12.** Locate the points (5, 0), (0, 5), (2, 5), (5, 2), (-3, 5), (-3, -5), (5, -3) and (6, 1) in the Cartesian plane.
- 13. Plot the following ordered pairs of number (x, y) as points in the Cartesian plane. Use the scale 1cm = 1 unit on the axes.

X	-3	0	-1	4	2
y	7	-3.5	-3	4	-3

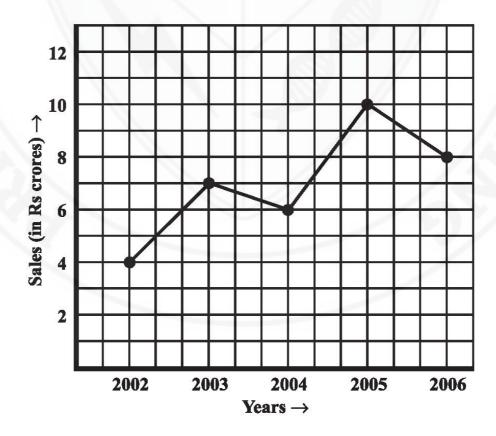
- 14. In which quadrant or on which axis do each of the points (-2, 4), (3, -1), (-1, 0), (1, 2) and (-1, 0), (3, -5) lie? Verify your answer by locating them on the Cartesian plane.
- 15. Plot the points (x, y) given in the following table on the plane, choosing suitable units of distance on the axes.

X	-1	2	-4	2	-3
y	0	-5	2	1	2

- **16.** Plot the following points and verify if they lie on a line. If they lie on a line, name it.
 - (i) (0, 2), (0, 5), (0, 6), (0, 3.5)
- (ii) A (1, 1), B (1, 2), C (1, 3), D (1, 4)
- (iii) K (1, 3), L (2, 3), M (3, 3), N (4, 3) (iv) W (2, 6), X (3, 5), Y (5, 3), Z (6, 2)
- 17. Draw the line passing through (2, 3) and (3, 2). Find the coordinates of the points at which this line meets the x-axis and y-axis.
- 18. Plot the following points on a graph sheet. Verify if they lie on a line
 - (a) A(4, 0), B(4, 2), C(4, 6), D(4, 2.5)
 - (b) P(1, 1), Q(2, 2), R(3, 3), S(4, 4)
 - (c) K(2, 3), L(5, 3), M(5, 5), N(2, 5)
- **19.** In which quadrant or on which axis do each of the points (5, 0), (0, 5), (2, 5), (5, 2), (-3, 5), (-3, 5)-5), (5, -3) and (6, 1) in the Cartesian plane.
- 20. Plot the points A (4, 4) and (-4, 4) on a graph sheet. Join the lines OA, OB and BA. What figure do you obtain.
- 21. The given graph describes the distances of a car from a city P at different times when it is travelling from City P to City Q, which are 350 km apart. Study the graph and answer the following:
 - (i) What information is given on the two axes?
 - (ii) From where and when did the car begin its journey?
 - (iii) How far did the car go in the first hour?
 - (iv) How far did the car go during (i) the 2nd hour? (ii) the 3rd hour?
 - (v) Was the speed same during the first three hours? How do you know it?
 - (vi) Did the car stop for some duration at any place? Justify your answer.
 - (vii) When did the car reach City Q?



- 22. The following line graph shows the yearly sales figures for a manufacturing company.
 - (a) What were the sales in (i) 2002 (ii) 2006?
 - (b) What were the sales in (i) 2003 (ii) 2005?
 - (c) Compute the difference between the sales in 2002 and 2006.
 - (d) In which year was there the greatest difference between the sales as compared to its previous year?



- **23.** Use the tables below to draw linear graphs.
 - (a) The number of days a hill side city received snow in different years.

Year	2003	2004	2005	2006
Days	8	10	5	12

(b) Population (in thousands) of men and women in a village in different years.

Year	2003	2004	2005	2006	2007
Number of Men	12	12.5	13	13.2	13.5
Number of Women	11.3	11.9	13	13.6	12.8

- 24. Plot the point (4, 3) on a graph sheet. Is it the same as the point (3, 4)?
- 25. The following table gives the quantity of petrol and its cost. Plot a graph to show the data.

No. of litres of petrol	10	15	20	25
Cost of petrol in Rs.	500	750	1000	1250

- **26.** A bank gives 10% Simple Interest (S.I.) on deposits by senior citizens. Draw a graph to illustrate the relation between the sum deposited and simple interest earned. Find from your graph
 - (a) the annual interest obtainable for an investment of Rs 250.
 - (b) the investment one has to make to get an annual simple interest of Rs 70.
- **27.** Ajit can ride a scooter constantly at a speed of 30 kms/hour. Draw a time-distance graph for this situation. Use it to find
 - (i) the time taken by Ajit to ride 75 km. (ii) the distance covered by Ajit in $3\frac{1}{2}$ hours.
- 28. Draw the graphs for the following table of values, with suitable scales on the axes.

Time (in hours)	6 am	7 am	8 am	9 am
Distances (in km)	40	80	120	160

Distance travelled by a car

- (i) How much distance did the car cover during the period 7.30 a.m. to 8 a.m?
- (ii) What was the time when the car had covered a distance of 100 km since it's start?