

**RD Sharma Solutions Class 9 Maths Chapter 11:** RD Sharma Solutions for Class 9 Chapter 11, Coordinate Geometry, are available here. In this chapter, students will learn about coordinate geometry basics, like the Cartesian plane, point coordinates, and how to plot points.

These solutions are free, and students can find them online or save them as PDFs. They're updated for the 2024-25 exams and are designed to help students improve their math skills. It's recommended to practice all textbook questions using these solutions for effective exam preparation.

## **RD Sharma Solutions Class 9 Maths Chapter 11 Coordinate Geometry PDF**

Here we have provided RD Sharma Class 9 Solutions Maths Chapter 11 solutions for the students to help them ace their examinations. Students can refer to these solutions and practice these questions to score better in the exams.

### **RD Sharma Solutions Class 9 Maths Chapter 11 Coordinate Geometry PDF**

## **Coordinate Geometry**

Class 11 Coordinate Geometry is a branch of mathematics that deals with the study of geometric figures using a coordinate system. In this subject, students learn how to represent points, lines, curves, and shapes on a coordinate plane using numerical coordinates. The Cartesian coordinate system, developed by Rene Descartes, is commonly used in coordinate geometry. It consists of two perpendicular number lines called the x-axis and the y-axis, which intersect at a point called the origin.

### **Key concepts covered in Class 11 Coordinate Geometry include:**

**Cartesian Coordinates:** Students learn how to represent points in a plane using ordered pairs of numbers  $(x, y)$ , where  $x$  is the distance along the horizontal x-axis and  $y$  is the distance along the vertical y-axis.

**Distance Formula:** Students learn how to calculate the distance between two points on a coordinate plane using the distance formula, which is derived from the Pythagorean theorem.

**Midpoint Formula:** Students learn how to find the midpoint of a line segment between two points on a coordinate plane using the midpoint formula.

**Slope of a Line:** Students learn about the concept of slope, which measures the steepness of a line. They also learn how to calculate the slope of a line using the rise over run formula.

**Equations of Lines:** Students learn how to write equations of lines in different forms, such as slope-intercept form, point-slope form, and standard form.

**Parallel and Perpendicular Lines:** Students learn how to determine if two lines are parallel or perpendicular based on their slopes.

**Conic Sections:** Students learn about conic sections, which are curves formed by the intersection of a plane and a double-napped cone. The main types of conic sections include the circle, ellipse, parabola, and hyperbola.

## **RD Sharma Solutions Class 9 Maths Chapter 11 Coordinate Geometry**

We've provided solutions for RD Sharma Class 9 Maths Chapter 11. These solutions created by subject experts of Physics Wallah. In this chapter, you'll learn about things like the Cartesian plane, how to find coordinates of a point, and how to plot points. The solutions give clear explanations to make solving textbook problems simpler. They're here to help you improve your math skills and do well in exams.

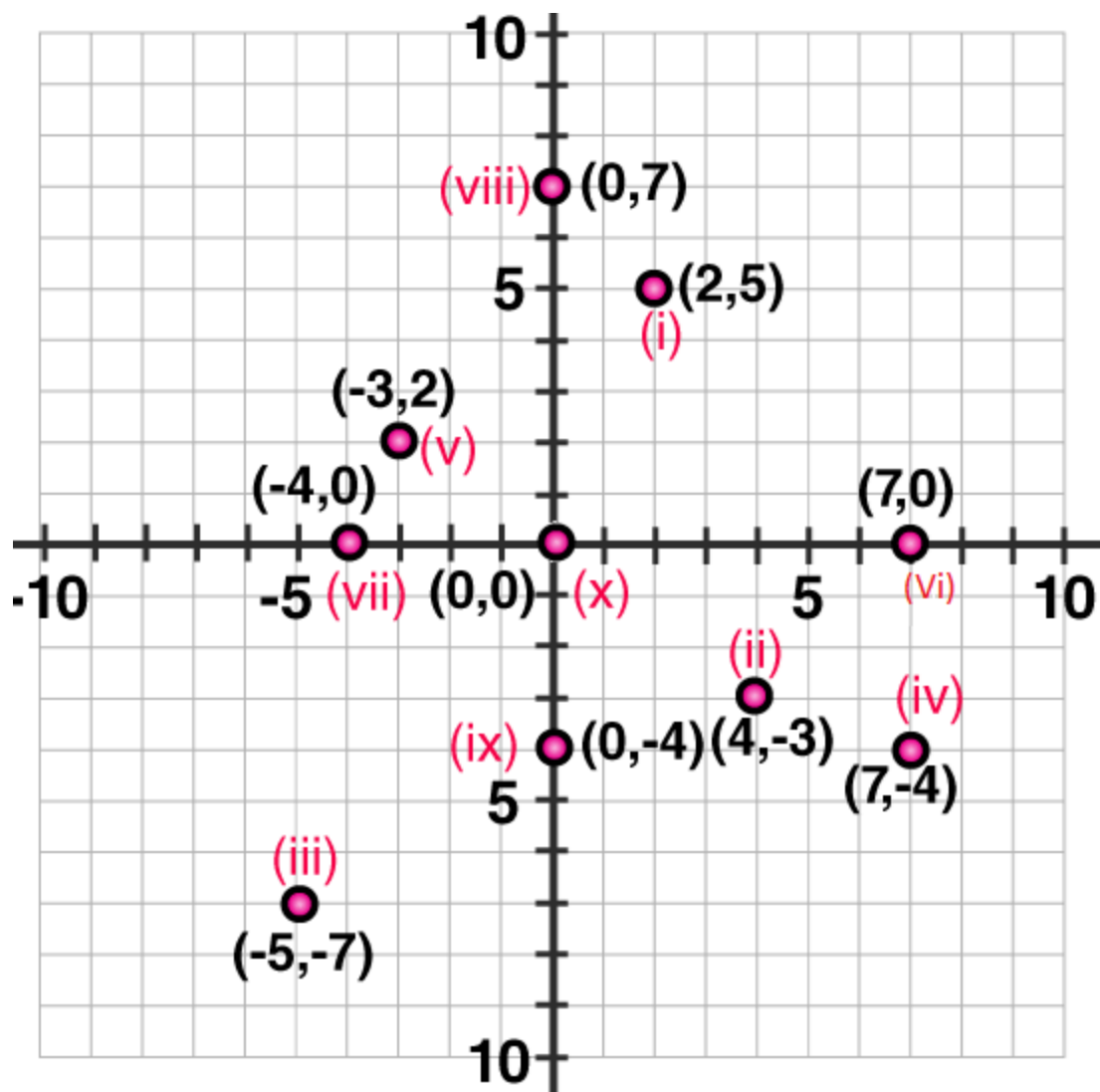
## **RD Sharma Solutions Class 9 Maths Chapter 11 Coordinate Geometry Exercise 11.1 Page No: 11.6**

**Question 1:** Plot the following points on the graph paper:

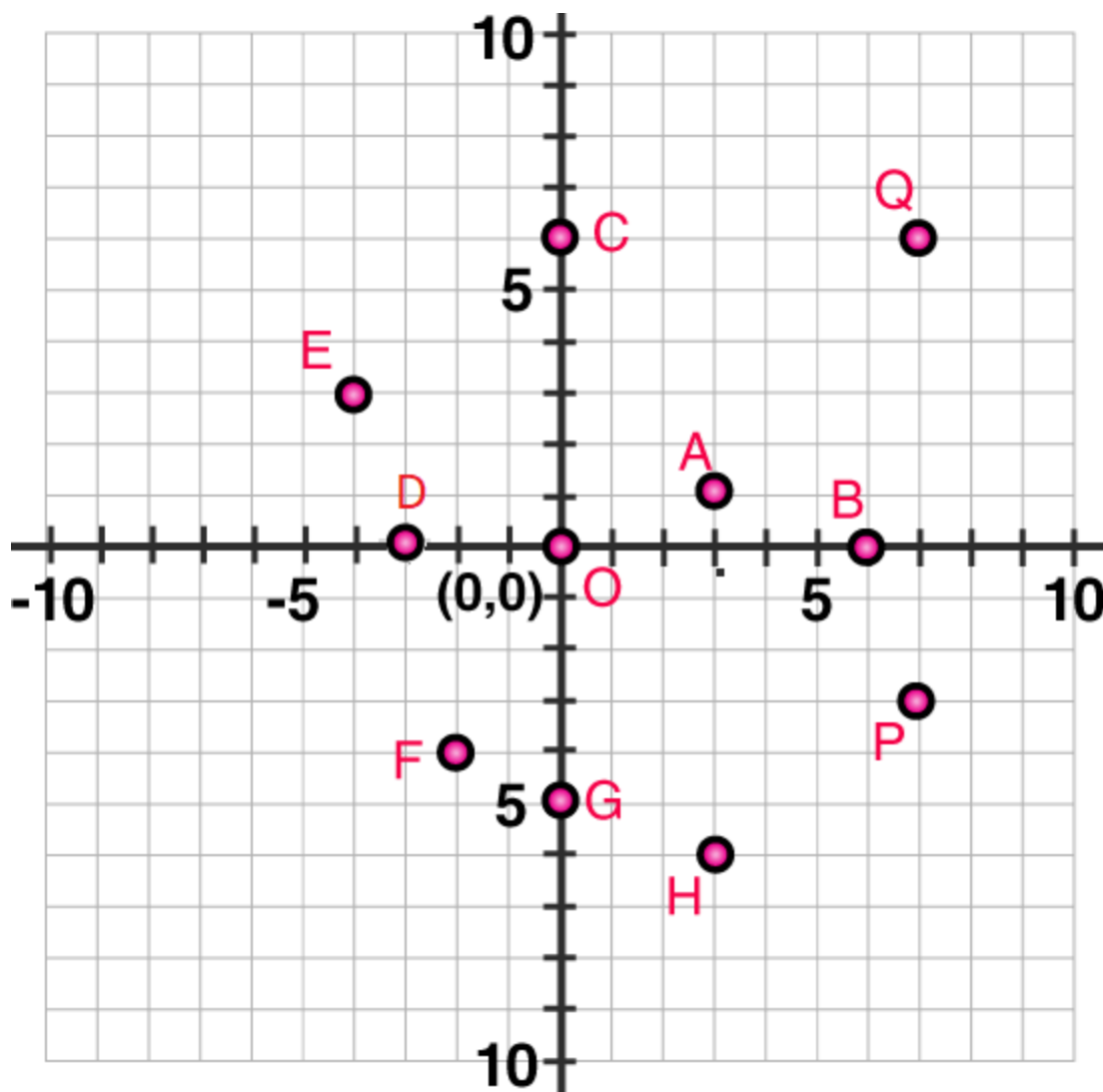
(i) (2,5) (ii) (4,-3) (iii) (-5,-7) (iv) (7,-4) (v) (-3,2)

(vi) (7,0) (vii) (-4,0) (viii) (0,7) (ix) (0,-4) (x) (0,0)

**Solution:**



Question 2: Write the coordinates of each of the following points marked in the graph paper.



**Solution:**

Point	Distance from the y-axis (units)	Distance from the x-axis (units)	Coordinates of Point
A	3	1	(3,1)
B	6	0	(6, 0)
C	0	6	(0, 6)
D	-3	0	(-3,0)
E	-4	3	(-4,3)
F	-2	-4	(-2,-4)

G	0	-5	(0,-5)
H	3	-6	(3,-6)
P	7	-3	(7,-3)
Q	7	6	(7,6)

#### **The explanation for Coordinates of A:**

The distance of point A from the y-axis is 3 units, and from the x-axis is 1 unit.

A lies in the first quadrant, so both the coordinates are positive.

This implies that the coordinates of A are (3,1).

Similarly, other points are,

$A (3,1)$ ,  $B (6,0)$ ,  $C (0,6)$ ,  $D (-3,0)$ ,  $E (-4,3)$ ,  $F (-2,-4)$ ,  $G (0,-5)$ ,  $H (3,-6)$ ,  $P (7,-3)$ ,  $Q (7,6)$

## **RD Sharma Solutions for Class 9 Maths Chapter 11 Coordinate Geometry Summary**

In Chapter 11 of RD Sharma Solutions for Class 9, students will explore essential concepts, including:

1. Rectangular or Cartesian coordinates of a point
2. Cartesian coordinate axes
3. Quadrants
4. Plotting of points

Students can download and practice these chapter-wise solutions, aligning with the questions in the RD Sharma Class 9 textbook, to improve their understanding and achieve good marks.