

CLASS 9

MATHEMATICS

EXTRA QUESTIONS

Class 9 Mathematics Chapter 1 Orienting Yourself: The Use of Coordinates – Extra Questions with Answers

Extra practice questions for Class 9 Maths Chapter 1 (Orienting Yourself: The Use of Coordinates), beyond the textbook. These Class 9 Mathematics Chapter 1 important questions are handy for last-minute exam practice.

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Extra practice questions for Class 9 Maths Chapter 1 (Orienting Yourself: The Use of Coordinates), beyond the textbook. These Class 9 Mathematics Chapter 1 important questions are handy for last-minute exam practice.

Very Short Answer Questions (1 mark)

Q1. What are the coordinates of a point lying on the x-axis, in general form?

Ans: $(x, 0)$.

Q2. In which quadrant does the point $(5, -2)$ lie?

Ans: Quadrant IV.

Q3. What is the other name for the x-coordinate of a point?

Ans: Abscissa.

Q4. How many quadrants does the Cartesian plane have?

Ans: Four.

Q5. What are the coordinates of a point lying on the y-axis, in general form?

Ans: $(0, y)$.

Short Answer Questions (2–3 marks)

Q6. Identify the quadrant (or axis) for each of these points: $(3, 5)$, $(-2, -7)$, $(0, 4)$, $(6, 0)$.

Ans: $(3, 5) \rightarrow$ Quadrant I; $(-2, -7) \rightarrow$ Quadrant III; $(0, 4) \rightarrow$ on the y-axis; $(6, 0) \rightarrow$ on the x-axis.

Q7. Explain why $(2, 5)$ and $(5, 2)$ represent two different points on the Cartesian plane.

Ans: Coordinates are ordered pairs, so the order matters: in $(2, 5)$, the x-coordinate is 2 and y-coordinate is 5, while in $(5, 2)$, the x-coordinate is 5 and y-coordinate is 2 — these describe two different positions relative to the axes, even though the same two numbers are used.

Q8. If a point has equal positive x and y coordinates, in which quadrant does it lie, and what shape does the set of all such points trace?

Ans: It lies in Quadrant I (since both coordinates are positive). The set of all such points (where $x = y$, both positive) traces a straight line through the origin at 45° to both axes.

Higher-Order Thinking / Application Questions

Q9. A point P is reflected across the x-axis to get point Q, and P has coordinates $(4, 7)$. What are the coordinates of Q, and what general rule does this illustrate?

Ans: Q has coordinates $(4, -7)$. This illustrates that reflecting a point across the x-axis keeps the x-coordinate the same but reverses the sign of the y-coordinate.

Q10. Four points form a rectangle: $(1, 1)$, $(5, 1)$, $(5, 4)$, and $(1, 4)$. Without drawing, determine the length and breadth of the rectangle using the coordinates.

Ans: The length (horizontal side) is the difference between x-coordinates of two points sharing the same y-coordinate: $5 - 1 = 4$ units. The breadth (vertical side) is the difference between y-coordinates of two points sharing the same x-coordinate: $4 - 1 = 3$ units. So the rectangle is 4 units by 3 units.

Class 9 Mathematics Chapter 1 – Solutions and Notes

For complete step-by-step answers and a quick summary, check the [Class 9 Mathematics Chapter 1 Solutions](#) and [Class 9 Mathematics Chapter 1 Revision Notes](#).

See also: [Chapter 1](#)

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