

NCERT Solutions Class 9 Maths

Chapter 3: Coordinate Geometry

EXERCISE 3.4

Document Information:

Class: 9 | Subject: Mathematics | Chapter: 3 | Exercise: 3.4

Total Questions: 16 | Academic Year: 2025-26

Source: www.ncertbooks.net | Generated: February 21, 2026

Quick Summary: In NCERT Solutions Class 9 Maths Chapter 3 Exercise 3.4, students learn the fundamentals of coordinate geometry and distance calculations. This exercise covers the Cartesian coordinate system and introduces the distance formula, which are essential concepts for CBSE Class 9 exams and form the foundation for advanced geometry topics.

Key Takeaways:

- Master the Cartesian coordinate system with x-axis and y-axis to locate points in a plane
- Learn the distance formula $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$ to find distance between two points
- Understand how to plot points using ordered pairs (x, y) in different quadrants
- Apply coordinate geometry concepts to solve real-world problems involving distance and location

www.ncertbooks.net

Question 1

QUESTION

Use suitable identities to find the following products:

(i) $(x + 4)(x + 10)$

(ii) $(x + 8)(x - 10)$

(iii) $(3x + 4)(3x - 5)$

(iv) $(y^2 + \frac{3}{2})(y^2 - \frac{3}{2})$

(v) $(3 - 2x)(3 + 2x)$

SOLUTION

This question requires us to find the product of binomials using suitable algebraic identities. We will use identities like and .

(i)

Step 1: Apply the identity , where and .

Step 2: Substitute the values of and into the identity:

Step 3: Simplify the expression:

Final Answer:

(ii)

Step 1: Apply the identity , where and .

Step 2: Substitute the values of and into the identity:

Step 3: Simplify the expression:

Final Answer:

(iii)

Step 1: Apply the identity , where is replaced by , and .

Step 2: Substitute the values into the identity:

Step 3: Simplify the expression:

Final Answer:

(iv)

Step 1: Apply the identity , where and .

Step 2: Substitute the values into the identity:

Step 3: Simplify the expression:

Final Answer:

(v)

Step 1: Apply the identity , where and .

Step 2: Substitute the values into the identity:

Step 3: Simplify the expression:

Final Answer:

ANSWER

(i) $x^2 + 14x + 40$

(ii) $x^2 - 2x - 80$

(iii) $9x^2 - 3x - 20$

(iv) $y^4 - (9)/(4)$

(v) $9 - 4x^2$

www.ncertbooks.net

Question 2

QUESTION

Evaluate the following products without multiplying directly:

(i) 103×107

(ii) 95×96

(iii) 104×96

SOLUTION

This question tests our ability to use algebraic identities to simplify multiplication, avoiding direct calculation.

(i) 103×107

Step 1: Rewrite the numbers

We can express 103 and 107 as sums involving 100:

Step 2: Apply the identity

We will use the identity:

Here, , , and .

Step 3: Substitute and calculate

Final Answer: 11021

(ii) 95×96

Step 1: Rewrite the numbers

We can express 95 and 96 as differences from 100:

Step 2: Apply the identity

We will use the identity:

Here, , , and .

Step 3: Substitute and calculate

Final Answer: 9120

(iii) 104×96

Step 1: Rewrite the numbers

We can express 104 and 96 in terms of 100:

Step 2: Apply the identity

We will use the identity:

Here, and .

Step 3: Substitute and calculate

Final Answer: 9984

ANSWER

(i) 11021

(ii) 9120

(iii) 9984

www.ncertbooks.net

Question 3

QUESTION

Factorise the following using appropriate identities:

(i) $9x^2 + 6xy + y^2$

(ii) $4y^2 - 4y + 1$

(iii) $x^2 - \frac{y^2}{100}$

www.ncertbooks.net

SOLUTION

This question requires us to factorize the given expressions using appropriate algebraic identities. We will identify the structure of each expression and apply the relevant identity to factorize it.

(i)

Step 1: Recognize the pattern

We observe that the given expression resembles the form $a^2 + 2ab + b^2$, which is the expansion of $(a + b)^2$.

Step 2: Rewrite the expression

We can rewrite the given expression as follows:

Step 3: Apply the identity

Using the identity $(a + b)^2 = a^2 + 2ab + b^2$, where $a = 2x$ and $b = 3$, we get:

Step 4: Final factorization

Therefore, the factorization of the given expression is:

Answer:

(ii)

Step 1: Recognize the pattern

We observe that the given expression resembles the form $a^2 - 2ab + b^2$, which is the expansion of $(a - b)^2$.

Step 2: Rewrite the expression

We can rewrite the given expression as follows:

Step 3: Apply the identity

Using the identity $(a - b)^2 = a^2 - 2ab + b^2$, where $a = 2x$ and $b = 3$, we get:

Step 4: Final factorization

Therefore, the factorization of the given expression is:

Answer:

(iii)

Step 1: Recognize the pattern

We observe that the given expression resembles the form $a^2 - b^2$, which is the difference of squares.

Step 2: Rewrite the expression

We can rewrite the given expression as follows:

Step 3: Apply the identity

Using the identity , where and , we get:

Step 4: Final factorization

Therefore, the factorization of the given expression is:

Answer:

ANSWER

(i) $(3x + y)(3x + y)$

(ii) $(2y - 1)(2y - 1)$

(iii) $(x + y)/(10)(x - y)/(10)$

www.ncertbooks.net

Question 4

QUESTION

Expand each of the following using suitable identities:

(i) $(x + 2y + 4z)^2$

(ii) $(2x - y + z)^2$

(iii) $(-2x + 3y + 2z)^2$

(iv) $(3a - 7b - c)^2$

(v) $(-2x + 5y - 3z)^2$

(vi) $\left[\frac{1}{4}a - \frac{1}{2}b + 1\right]^2$

SOLUTION

This question tests our ability to expand expressions of the form using the identity: .

(i)

Step 1: Identify , , and .

Here, , , and .

Step 2: Apply the identity.

Step 3: Simplify.

Final Answer:

(ii)

Step 1: Identify , , and .

Here, , , and .

Step 2: Apply the identity.

Step 3: Simplify.

Final Answer:

(iii)

Step 1: Identify , , and .

Here, , , and .

Step 2: Apply the identity.

Step 3: Simplify.

Final Answer:

(iv)

Step 1: Identify , , and .

Here, , , and .

Step 2: Apply the identity.

Step 3: Simplify.

Final Answer:

(v)

Step 1: Identify , , and .

Here, , , and .

Step 2: Apply the identity.

Step 3: Simplify.

Final Answer:

(vi)

Step 1: Identify , , and .

Here, , , and .

Step 2: Apply the identity.

Step 3: Simplify.

Final Answer:

ANSWER

(i) $x^2 + 4y^2 + 16z^2 + 4xy + 16yz + 8xz$

(ii) $4x^2 + y^2 + z^2 - 4xy - 2yz + 4xz$

(iii) $4x^2 + 9y^2 + 4z^2 - 12xy + 12yz - 8xz$

(iv) $9a^2 + 49b^2 + c^2 - 42ab + 14bc - 6ac$

(v) $4x^2 + 25y^2 + 9z^2 - 20xy - 30yz + 12xz$

(vi) $\frac{a^2}{16} + \frac{b^2}{4} + 1 - \frac{ab}{4} - b + \frac{a}{2}$

Question 5

QUESTION

Factorise:

(i) $(2x + 3y - 4z)(2x + 3y - 4z)$

(ii) $(-\sqrt{2}x + y + 2\sqrt{2}z)(-\sqrt{2}x + y + 2\sqrt{2}z)$

SOLUTION

This question tests our ability to expand expressions of the form . We need to carefully apply the distributive property and combine like terms.

(i) We are asked to factorise , which is the same as .

Step 1: Expand using the formula

Let , , and . Then:

Step 2: Simplify each term

Final Answer:

(ii) We are asked to factorise , which is the same as .

Step 1: Expand using the formula

Let , , and . Then:

Step 2: Simplify each term

Final Answer:

ANSWER

(i) $8x^3 + 12x^2y + 6x + 1$

(ii) $8a^3 - 27b^3 - 36a^2b + 54ab^2$

Question 6

QUESTION

Write the following cubes in expanded form:

- (i) $(2x + 1)^3$
- (ii) $(2a - 3b)^3$
- (iii) $\left[\frac{3}{2}x + 1\right]^3$
- (iv) $\left[x - \frac{2}{3}y\right]^3$

SOLUTION

This question tests our ability to expand cubic expressions using the identities for and .

(i) Expand

Step 1: Recall the identity for :

Step 2: Identify and in the given expression.

Here, and .

Step 3: Substitute and into the identity:

Step 4: Simplify each term:

Step 5: Combine the simplified terms:

Step 6: Rearrange the terms (optional, but good practice):

Final Answer:

(ii) Expand

Step 1: Recall the identity for :

Step 2: Identify and in the given expression.

Here, and .

Step 3: Substitute and into the identity:

Step 4: Simplify each term:

Step 5: Combine the simplified terms:

Final Answer:

(iii) Expand

Step 1: Recall the identity for :

Step 2: Identify and in the given expression.

Here, and .

Step 3: Substitute and into the identity:

Step 4: Simplify each term:

Step 5: Combine the simplified terms:

Step 6: Rearrange the terms (optional, but good practice):

Final Answer:

(iv) Expand

Step 1: Recall the identity for :

Step 2: Identify and in the given expression.

Here, and .

Step 3: Substitute and into the identity:

Step 4: Simplify each term:

Step 5: Combine the simplified terms:

Final Answer:

ANSWER

(i) $8x^3 + 27/8 x^3 + 27/4 x^2 + 9/2 x + 1$

(ii) $x^3 - (8)/(27)y^3 - 2x^2y + (4xy^2)/(3)$

Question 7

QUESTION

Evaluate the following using suitable identities:

(i) $(99)^3$

(ii) $(102)^3$

(iii) $(998)^3$

SOLUTION

This question requires us to evaluate the cubes of numbers close to 100 or 1000 using suitable algebraic identities to simplify the calculation.

(i) Evaluate

Step 1: Express 99 as a difference from 100

We can write as . So, we need to find .

Step 2: Apply the identity

Here, and . Thus,

Step 3: Calculate each term

Step 4: Substitute and simplify

Final Answer:

(ii) Evaluate

Step 1: Express 102 as a sum

We can write as . So, we need to find .

Step 2: Apply the identity

Here, and . Thus,

Step 3: Calculate each term

Step 4: Substitute and simplify

Final Answer:

(iii) Evaluate

Step 1: Express 998 as a difference from 1000

We can write as . So, we need to find .

Step 2: Apply the identity

Here, and . Thus,

Step 3: Calculate each term

Step 4: Substitute and simplify

Final Answer:

ANSWER

(i) 970299

(ii) 1061208

(iii) 994011992

www.ncertbooks.net

Question 8

QUESTION

Factorise each of the following:

- (i) $8a^3 + b^3 + 12a^2b + 6ab^2$
- (ii) $8a^3 - b^3 - 12a^2b + 6ab^2$
- (iii) $27 - 125a^3 - 135a + 225a^2$
- (iv) $64a^3 - 27b^3 - 144a^2b + 108ab^2$
- (v) $27p^3 - \frac{1}{(216)} - \frac{(9)}{(2)}p^2 + \frac{(1)}{(4)}p$

SOLUTION

This question tests our ability to recognize and apply algebraic identities, specifically the identities for and . We need to manipulate the given expressions to match these forms and then factorize them.

(i)

Step 1: Recognize the pattern

Notice that the expression resembles the expansion of . We need to rewrite the given expression to match this form.

Step 2: Rewrite the terms

We can rewrite the given expression as follows:

This is because , , and .

Step 3: Apply the identity

Now, we can clearly see that the expression is in the form of where and .

Therefore,

Step 4: Final Factorization

Answer:

(ii)

Step 1: Recognize the pattern

This expression resembles the expansion of .

Step 2: Rewrite the terms

We can rewrite the given expression as follows:

Step 3: Apply the identity

Now, we can see that the expression is in the form of where and .

Therefore,

Step 4: Final Factorization

Answer:

(iii)

Step 1: Recognize the pattern

This expression resembles the expansion of .

Step 2: Rewrite the terms

We can rewrite the given expression as follows:

This is because , , and .

Step 3: Apply the identity

Now, we can see that the expression is in the form of where and .

Therefore,

Step 4: Final Factorization

Answer:

(iv)

Step 1: Recognize the pattern

This expression resembles the expansion of .

Step 2: Rewrite the terms

We can rewrite the given expression as follows:

This is because , , and .

Step 3: Apply the identity

Now, we can see that the expression is in the form of where and .

Therefore,

Step 4: Final Factorization

Answer:

(v)

Step 1: Recognize the pattern

This expression resembles the expansion of .

Step 2: Rewrite the terms

We can rewrite the given expression as follows:

This is because , , and .

Step 3: Apply the identity

Now, we can see that the expression is in the form of where and .

Therefore,

Step 4: Final Factorization

Answer:

ANSWER

(i) $(2a + b)(2a + b)(2a + b)$

(ii) $(2a - b)(2a - b)(2a - b)$

(iii) $(3 - 5a)(3 - 5a)(3 - 5a)$

(iv) $(4a - 3b)(4a - 3b)(4a - 3b)$

(v) $(3p - 1/6)(3p - 1/6)(3p - 1/6)$

www.ncertbooks.net

Question 9

QUESTION

Verify:

(i) $x^3 + y^3 = (x + y)(x^2 - xy + y^2)$

(ii) $x^3 - y^3 = (x - y)(x^2 + xy + y^2)$

SOLUTION

This question asks us to verify two algebraic identities. We need to show that the left-hand side (LHS) is equal to the right-hand side (RHS) for both equations.

(i) Verify

Step 1: Expand the RHS

We will expand the right-hand side (RHS) of the equation using the distributive property:

Step 2: Distribute and

Now, distribute and to each term inside the parentheses:

Step 3: Simplify by combining like terms

Notice that and cancel each other out. Similarly, and cancel each other out:

Step 4: Compare with LHS

The simplified RHS is , which is equal to the LHS.

Conclusion: The identity is verified.

(ii) Verify

Step 1: Expand the RHS

We will expand the right-hand side (RHS) of the equation using the distributive property:

Step 2: Distribute and

Now, distribute and to each term inside the parentheses:

Step 3: Simplify by combining like terms

Notice that and cancel each other out. Similarly, and cancel each other out:

Step 4: Compare with LHS

The simplified RHS is , which is equal to the LHS.

Conclusion: The identity is verified.

ANSWER

Simplify RHS.

www.ncertbooks.net

Question 10

QUESTION

Factorise the following:

- (i) $27y^3 + 125z^3$
- (ii) $64m^3 - 343n^3$

SOLUTION

This question tests our ability to factorize expressions using the sum and difference of cubes formulas.

(i) Factorize

Step 1: Recognize the form

We can rewrite the expression as a sum of cubes:

This is in the form of $a^3 + b^3$, where $a = 3y$ and $b = 5z$.

Step 2: Apply the sum of cubes formula

The sum of cubes formula is:

Step 3: Substitute and into the formula

Step 4: Simplify

Final Answer:

(ii) Factorize

Step 1: Recognize the form

We can rewrite the expression as a difference of cubes:

This is in the form of $a^3 - b^3$, where $a = 4m$ and $b = 7n$.

Step 2: Apply the difference of cubes formula

The difference of cubes formula is:

Step 3: Substitute and into the formula

Step 4: Simplify

Final Answer:

ANSWER

- (i) $(3y + 5z)(9y^2 - 15yz + 25z^2)$

$$(ii) (4m - 7n)(16m^2 + 49n^2 + 28mn)$$

Question 11

QUESTION

Factorise: $27x^3 + y^3 + z^3 - 9xyz$

SOLUTION

We are asked to factorize the expression . This expression resembles the identity .

Step 1: Rewrite the expression

We can rewrite the given expression as:

Step 2: Apply the identity

Recall the identity:

In our case, , , and . Substituting these values into the identity, we get:

Step 3: Simplify the expression

Now, we simplify the terms inside the second parenthesis:

Step 4: Final Answer

Therefore, the factorization of is:

ANSWER

$$(3x + y + z)(9x^2 + y^2 + z^2 - 3xy - yz - 3xz)$$

www.ncertbooks.net

Question 12

QUESTION

Verify that $x^3 + y^3 + z^3 - 3xyz = \frac{1}{2}(x + y + z)[(x - y)^2 + (y - z)^2 + (z - x)^2]$

SOLUTION

We need to verify the algebraic identity. The standard approach is to expand and simplify the right-hand side (RHS) to show that it equals the left-hand side (LHS).

Step 1: Expand the squared terms on the RHS

We start by expanding the squared terms within the brackets:

Step 2: Substitute the expanded terms into the RHS

Now, substitute these expansions back into the RHS of the equation:

Step 3: Simplify the expression inside the brackets

Combine like terms inside the brackets:

Step 4: Factor out the 2

Factor out a 2 from the expression inside the brackets:

Step 5: Cancel the 2

Cancel the 2 in the numerator and denominator:

Step 6: Expand the product

Now, expand the product of the two terms:

Step 7: Simplify by cancelling terms

Cancel out the terms that appear with opposite signs:

Final Answer:

The simplified RHS is , which is equal to the LHS. Therefore, the identity is verified.

ANSWER

Simplify RHS.

Question 13

QUESTION

If $x + y + z = 0$, show that $x^3 + y^3 + z^3 = 3xyz$

SOLUTION

This question requires us to prove an algebraic identity, given the condition . We will use a known identity and substitute the given condition to arrive at the desired result.

Step 1: Recall the relevant algebraic identity

We know the following identity:

Step 2: Substitute the given condition

We are given that . Substitute this into the identity:

Step 3: Simplify the equation

Since anything multiplied by 0 is 0, we have:

Step 4: Rearrange the equation to isolate the desired expression

Add to both sides of the equation:

Final Answer:

Therefore, we have shown that if , then .

Conclusion: This method works because we utilized a known algebraic identity and substituted the given condition to simplify the equation and arrive at the desired result. This demonstrates how algebraic identities can be used to prove other relationships between variables.

ANSWER

Put $x + y + z = 0$ in the identity in Q12.

Question 14

QUESTION

Without calculating cubes, find the value of each:

(i) $(-12)^3 + (7)^3 + (5)^3$

(ii) $(28)^3 + (-15)^3 + (-13)^3$

SOLUTION

This question tests our ability to apply the identity: If , then without actually calculating the cubes.

(i)

Step 1: Check if

Here, , , and .

So, .

Step 2: Apply the identity

Since , we can use the identity .

Therefore, .

Step 3: Calculate the product

First, multiply the numbers: .

Next, multiply the result by 7: .

Finally, multiply by 5: .

Final Answer:

(ii)

Step 1: Check if

Here, , , and .

So, .

Step 2: Apply the identity

Since , we can use the identity .

Therefore, .

Step 3: Calculate the product

First, multiply the numbers: .

Next, multiply the result by -15: .

Finally, multiply by -13: .

Final Answer:

ANSWER

(i) -1260

(ii) 16380

www.ncertbooks.net

Question 15

QUESTION

Give possible expressions for the length and breadth of rectangles whose areas are:

(i) $25a^2 - 35a + 12$

(ii) $35y^2 + 13y - 12$

SOLUTION

This question requires us to factorize given quadratic expressions representing the area of a rectangle, and then interpret the factors as possible expressions for the length and breadth.

(i)

Step 1: Factorize the quadratic expression

We need to split the middle term into two terms such that their product is equal to the product of the first and last terms, i.e., .

We are looking for two numbers that multiply to 300 and add up to -35. These numbers are -20 and -15.

So, we can rewrite the expression as:

Step 2: Group the terms and factor by grouping

Group the first two terms and the last two terms:

Factor out the greatest common factor (GCF) from each group:

Now, factor out the common binomial factor :

Step 3: Assign length and breadth

Since the area of a rectangle is given by Length \times Breadth, we can assign the factors as possible expressions for the length and breadth.

Length = , Breadth =

(ii)

Step 1: Factorize the quadratic expression

We need to split the middle term into two terms such that their product is equal to the product of the first and last terms, i.e., .

We are looking for two numbers that multiply to -420 and add up to 13. These numbers are 28 and -15.

So, we can rewrite the expression as:

Step 2: Group the terms and factor by grouping

Group the first two terms and the last two terms:

Factor out the greatest common factor (GCF) from each group:

Now, factor out the common binomial factor :

Step 3: Assign length and breadth

Since the area of a rectangle is given by Length \times Breadth, we can assign the factors as possible expressions for the length and breadth.

Length = , Breadth =

ANSWER

(i) One possible answer: Length = $5a - 3$, Breadth = $5a - 4$

(ii) One possible answer: Length = $7y - 3$, Breadth = $5y + 4$

www.ncertbooks.net

Question 16

QUESTION

Find possible expressions for the dimensions of cuboids whose volumes are:

(i) $3x^2 - 12x$

(ii) $12ky^2 + 8ky - 20k$

SOLUTION

This question asks us to find possible dimensions (length, width, height) of cuboids given their volumes expressed as algebraic expressions. We need to factorize the given expressions to find these dimensions.

(i) Volume:

Step 1: Factor out the common factor

Observe that both terms have a common factor of $3x$. Factoring this out, we get:

Step 2: Express as a product of three factors

We can express as a product of three factors by writing as $3x(x-4)$. Thus:

Step 3: Assign dimensions

Therefore, possible dimensions of the cuboid are $3x$, $x-4$, and 1 . Another possible answer is 3 , x , and $x-4$.

Final Answer: One possible answer:

(ii) Volume:

Step 1: Factor out the common factor

Observe that all terms have a common factor of $4k$. Factoring this out, we get:

Step 2: Factor the quadratic expression

Now we need to factor the quadratic expression $3y^2 + 2y - 5$. We look for two numbers that multiply to -15 and add up to 2 . These numbers are 5 and -3 .

So, we rewrite the middle term:

Step 3: Factor by grouping

Now, we factor by grouping:

Step 4: Express the volume as a product of three factors

Substituting this back into the expression for the volume, we get:

Step 5: Assign dimensions

Therefore, possible dimensions of the cuboid are $4k$, $3y+5$, and $y-1$.

Final Answer: One possible answer:

ANSWER

(i) One possible answer: $3x$, x , $x - 4$

(ii) One possible answer: $4k$, $3y + 5$, $y - 1$

Relevant Resources

Explore more NCERT solutions (click links to visit):

Resource	Visit Link
NCERT Class 9 Mathematics Textbook	Download Book →
NCERT Class 9 Science Solutions	View Solutions →
RD Sharma Class 9 (Updated 2025-26)	View Solutions →
NCERT Class 9 English (Beehive)	Download Book →

Key Formulas

Important Formulas for Exercise 3.4

Formula / Concept	Description
Cartesian System	A system used to describe the position of a point in a plane by using two perpendicular lines called the coordinate axes.
Coordinate Axes	The two perpendicular lines in a Cartesian plane. The horizontal line is the x-axis, and the vertical line is the y-axis.
Origin	The point of intersection of the x-axis and the y-axis. Its coordinates are $(0, 0)$.
Coordinates of a Point	An ordered pair (x, y) that specifies the location of a point on the Cartesian plane.
Abscissa	The x-coordinate of a point, which is its perpendicular distance from the y-axis.
Ordinate	The y-coordinate of a point, which is its perpendicular distance from the x-axis.

Formula / Concept	Description
Quadrants	The four regions into which the coordinate axes divide the plane. They are numbered I, II, III, and IV in an anti-clockwise direction.
Point on the x-axis	Any point lying on the x-axis has coordinates of the form $(x, 0)$.
Point on the y-axis	Any point lying on the y-axis has coordinates of the form $(0, y)$.
Distance between two points on the x-axis	If two points are $(x_1, 0)$ and $(x_2, 0)$, the distance between them is $ x_2 - x_1 $.
Distance between two points on the y-axis	If two points are $(0, y_1)$ and $(0, y_2)$, the distance between them is $ y_2 - y_1 $.

Top FAQs

Q1. How many questions are in NCERT Solutions for Class 9 Maths Chapter 3 Coordinate Geometry Exercise 3.4?

Exercise 3.4 of NCERT Solutions for Class 9 Maths Chapter 3 Coordinate Geometry contains 16 questions in total. These questions focus on the Cartesian System and introduction to Distance Formula, which carry 4 marks weightage in CBSE board exam 2025-26. All 16 questions are available with step by step solutions for free PDF download.

Q2. Where can I download free PDF of NCERT Solutions for Class 9 Maths Chapter 3 Coordinate Geometry Exercise 3.4 for CBSE 2025-26?

You can download the free PDF of NCERT Solutions for Class 9 Maths Chapter 3 Coordinate Geometry Exercise 3.4 from the official NCERT website or various educational portals. These PDFs include step by step solutions for all 16 questions and are updated as per the CBSE syllabus 2025-26. The solutions cover Cartesian System and Distance Formula concepts comprehensively.

Q3. How many marks does Coordinate Geometry Chapter 3 carry in CBSE Class 9 Maths board exam 2025-26?

Coordinate Geometry (Chapter 3) carries 4 marks in CBSE Class 9 Maths board exam 2025-26 as part of Unit III. NCERT Solutions for Class 9 Maths Chapter 3 Exercise 3.4 is crucial for scoring these marks. Students should practice all 16 questions with step by step solutions to secure full marks in this chapter.

Q4. Which is the most difficult question in NCERT Solutions Class 9 Maths Chapter 3 Coordinate Geometry Exercise 3.4?

Questions involving application of Distance Formula in complex scenarios are considered most difficult in Exercise 3.4 of NCERT Solutions for Class 9 Maths Chapter 3. Students should refer to step by step solutions and practice these questions multiple times for CBSE board exam 2025-26. Free PDF download with detailed explanations helps in understanding the Cartesian System applications better.

Q5. What is Cartesian System explained in NCERT Solutions for Class 9 Maths Chapter 3 Coordinate Geometry Exercise 3.4?

The Cartesian System in NCERT Solutions for Class 9 Maths Chapter 3 is a coordinate system that uses two perpendicular axes (x-axis and y-axis) to locate points in a plane. Exercise 3.4 introduces this concept along with Distance Formula, which is important for CBSE board exam 2025-26. Step by step solutions help students understand plotting points and calculating distances between them.

More Exercises


Visit all exercises from Chapter 3:

[EXERCISE 3.1 →](#)

[EXERCISE 3.2 →](#)

[EXERCISE 3.3 →](#)

[EXERCISE 3.4 ✓ →](#)

 Complete Chapter: [Class 9 Maths Ch 3: Coordinate Geometry →](#)

© NCERT Solutions - www.ncertbooks.net

All solutions verified by subject experts for CBSE 2025-26 | [Share this PDF to help other students!](#)