

CLASS 9

MATHEMATICS

NCERT SOLUTIONS

NCERT Solutions for Class 9 Mathematics Chapter 6: Measuring Space: Perimeter and Area – Free PDF Download

Chapter 6 of Class 9 Maths Ganita Manjari Part 1 is Measuring Space: Perimeter and Area. It consolidates and extends earlier mensuration knowledge, introducing Heron's formula for finding the area of a triangle from its three sides alone. These Class 9 Mathematics Chapter 6 solutions are also useful as quick revisio...

Contents

- Perimeter and Area Basics
- Heron's Formula
- Area of a Triangle Using the Base-Height Formula
- Area of Quadrilaterals Using Triangulation
- Applications
- Class 9 Mathematics Chapter 6 – Notes and Extra Questions

Chapter 6 of Class 9 Maths *Ganita Manjari Part 1* is Measuring Space: Perimeter and Area. It consolidates and extends earlier mensuration knowledge, introducing Heron's formula for finding the area of a triangle from its three sides alone. These Class 9 Mathematics Chapter 6 solutions are also useful as quick revision notes before exams.

Perimeter and Area Basics

Perimeter is the total distance around the boundary of a closed figure. **Area** is the amount of surface enclosed within the figure. Standard formulas include: rectangle (Perimeter = $2(l+b)$, Area = $l \times b$), square (Perimeter = $4s$, Area = s^2), and parallelogram (Area = base $\times$ height).

Heron's Formula

For a triangle with sides a , b , c , the **semi-perimeter** is $s = (a+b+c)/2$, and the area is given by **Heron's formula**: Area = $\sqrt{s(s-a)(s-b)(s-c)}$. This is especially useful when the height of the triangle isn't directly known.

Area of a Triangle Using the Base-Height Formula

When the height is known, the simpler formula Area = $\frac{1}{2} \times \text{base} \times \text{height}$ can be used instead; Heron's formula is needed specifically when only the three side lengths are given.

Area of Quadrilaterals Using Triangulation

The area of a general quadrilateral (with one known diagonal) can be found by splitting it into two triangles along the diagonal, finding each triangle's area (using Heron's formula if needed), and adding them together.

Applications

These formulas are used to find the area of irregularly shaped fields, plots of land, and other real-world figures where direct height measurement is impractical but side lengths can be measured.

Class 9 Mathematics Chapter 6 – Notes and Extra Questions

Along with these NCERT Solutions, students can also use the [Class 9 Mathematics Chapter 6 Extra Questions](#) and [Class 9 Mathematics Chapter 6 Revision Notes](#) for quick revision and extra practice.

See also: [Chapter 1](#) | [Chapter 2](#) | [Chapter 3](#) | [Chapter 4](#) | [Chapter 5](#)

Practice more: [Chapter 1](#) | [Chapter 2](#) | [Chapter 3](#) | [Chapter 4](#) | [Chapter 5](#)

Quick revision: [Chapter 1](#) | [Chapter 2](#) | [Chapter 3](#) | [Chapter 4](#) | [Chapter 5](#)

© NCERTBooks.org — your one-stop source for Class 1 to 12 NCERT Books, Solutions, Extra Questions, Revision Notes, Formulas Handbooks and more. Visit ncertbooks.org for the latest chapters as they are published.