

Topics to be Covered in 8th Class Mathematics

Topic	Content
Rational Numbers	Introduction
Rational Numbers	Properties of Rational Numbers
Rational Numbers	Closure
Rational Numbers	Commutativity
Rational Numbers	Associativity
Rational Numbers	Identity
Rational Numbers	Distributivity of multiplication over addition for rational numbers
Linear Equations in One Variable	Introduction
Linear Equations in One Variable	Solving Equations having the Variable on both Sides
Linear Equations in One Variable	Reducing Equations to Simpler Form
Understanding Quadrilaterals	Introduction
Understanding Quadrilaterals	Convex and concave polygons
Understanding Quadrilaterals	Regular and irregular polygons

Understanding Quadrilaterals	Sum of the Measures of the Exterior Angles of a Polygon
Understanding Quadrilaterals	Kinds of Quadrilaterals
Understanding Quadrilaterals	Trapezium
Understanding Quadrilaterals	Kite
Understanding Quadrilaterals	Parallelogram
Understanding Quadrilaterals	Elements of a parallelogram
Understanding Quadrilaterals	Some Special Parallelograms
Understanding Quadrilaterals	Rhombus
Understanding Quadrilaterals	A rectangle
Understanding Quadrilaterals	A square
Data Handling	Looking for Information
Data Handling	Circle Graph or Pie Chart
Data Handling	Chance and Probability
Data Handling	Getting a result
Data Handling	Equally likely outcomes
Data Handling	Linking chances to probability
Data Handling	Outcomes as events

Data Handling	Chance and probability related to real life
Squares and Square Roots	Introduction
Squares and Square Roots	Properties of Square Numbers
Squares and Square Roots	Some More Interesting Patterns
Squares and Square Roots	Finding the Square of a Number
Squares and Square Roots	Other patterns in squares
Squares and Square Roots	Pythagorean triplets
Squares and Square Roots	Square Roots
Squares and Square Roots	Finding square roots
Squares and Square Roots	Finding square root through repeated subtraction
Squares and Square Roots	Finding square root through prime factorisation
Squares and Square Roots	Finding square root by division method
Squares and Square Roots	Square Roots of Decimals
Cubes and Cube Roots	Introduction
Cubes and Cube Roots	Cubes
Cubes and Cube Roots	Some interesting patterns
Cubes and Cube Roots	Cube Roots

Comparing Quantities	Recalling Ratios and Percentages
Comparing Quantities	Finding Discounts
Comparing Quantities	Estimation in percentages
Comparing Quantities	Sales Tax/Value Added Tax/Goods and Services Tax
Comparing Quantities	Compound Interest
Comparing Quantities	Deducing a Formula for Compound Interest
Comparing Quantities	Applications of Compound Interest Formula
Algebraic Expressions and Identities	Addition and Subtraction of Algebraic Expressions
Algebraic Expressions and Identities	Multiplication of Algebraic Expressions: Introduction
Algebraic Expressions and Identities	Multiplying a Monomial by a Monomial
Algebraic Expressions and Identities	Multiplying two monomials
Algebraic Expressions and Identities	Multiplying three or more monomials
Algebraic Expressions and Identities	Multiplying a Monomial by a Polynomial
Algebraic Expressions and Identities	Multiplying a monomial by a binomial
Algebraic Expressions and Identities	Multiplying a monomial by a trinomial
Algebraic Expressions and Identities	Multiplying a Polynomial by a Polynomial
Algebraic Expressions and Identities	Multiplying a binomial by a binomial

Algebraic Expressions and Identities	Multiplying a binomial by a trinomial
Algebraic Expressions and Identities	Multiplying a binomial by a trinomial
Mensuration	Introduction
Mensuration	Area of a Polygon
Mensuration	Solid Shapes
Mensuration	Surface Area of Cube, Cuboid and Cylinder
Mensuration	Cuboid
Mensuration	Cube
Mensuration	Cylinders
Mensuration	Volume of Cube, Cuboid and Cylinder
Mensuration	Volume and Capacity
Exponents and Powers	Introduction
Exponents and Powers	Powers with Negative Exponents
Exponents and Powers	Laws of Exponents
Exponents and Powers	Use of Exponents to Express Small Numbers in Standard Form
Exponents and Powers	Comparing very large and very small numbers
Direct and Inverse Proportions	Introduction

Direct and Inverse Proportions	Direct Proportion
Direct and Inverse Proportions	Inverse Proportion
Factorisation	Introduction
Factorisation	Factors of natural numbers
Factorisation	Factors of algebraic expressions
Factorisation	What is Factorisation?
Factorisation	Method of common factors
Factorisation	Factorisation by regrouping terms
Factorisation	Factorisation using identities
Factorisation	Factors of the form $(x + a)(x + b)$
Factorisation	Division of Algebraic Expressions
Factorisation	Division of a monomial by another monomial
Factorisation	Division of a polynomial by a monomial
Factorisation	Division of Algebraic Expressions Continued (Polynomial \div Polynomial)
Introduction to Graphs	Introduction
Introduction to Graphs	A line graph
Introduction to Graphs	Some Applications