

Mathematics Grade 7 Curriculum



Sessions 1 - 58



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Sessions 1 - 12

123 Integers

- Recap of Integers
- Apply Addition and Subtraction of Integers in Contextual Problems
- Apply the Properties of Addition and Subtraction of Integers
- **RDP Session(Revision, Doubt and Practice Session)**
- Multiply and Divide Integers
- Apply the Properties of Multiplication and Division of Integers
- Apply Multiplication and Division of Integers in Contextual Problems
- **RDP Session(Revision, Doubt and Practice Session)**
- **Checkpoint Assessment-1**

Sessions 13 - 27

2/3 Fractions and Decimals

- Recap of Fractions
- Multiply Fractions
- Find Absolute Value of Integers
- Divide Fractions
- Apply Operations on Fractions in Contextual Problems
- **RDP Session(Revision, Doubt and Practice Session)**
- Recap of Decimals
- Multiply Decimals
- Divide Decimals
- Apply Operations on Decimals in Contextual Problems
- **RDP Session(Revision, Doubt and Practice Session)**
- **Checkpoint Assessment-2**

Sessions 28 - 39

1 2 3 Rational Numbers

- Definition, Representation, and Standard Form
- Comparing Rational Numbers
- **RDP Session(Revision, Doubt and Practice Session)**
- Addition and Subtraction of Rational Numbers
- Multiplication and Division of Rational Numbers
- **RDP Session(Revision, Doubt and Practice Session)**
- **Checkpoint Assessment-3**

Sessions 40 - 49

x² Exponents

- Definition and Exponential Form
- Product Law and Power Law
- Quotient Law
- **RDP Session(Revision, Doubt and Practice Session)**
- Powers of Products and Fractions
- Standard Form
- **RDP Session(Revision, Doubt and Practice Session)**
- **Checkpoint Assessment-4**

Sessions 50 - 58

% Percentages

- Definition of Percentages
- Applied Problems on Percentages
- Percentage Change
- **RDP Session(Revision, Doubt and Practice Session)**
- **Checkpoint Assessment-5**

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Sessions 59 - 96



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Sessions 59 - 64

Commercial Math

Profit and Loss

Simple Interest

RDP Session(Revision, Doubt and Practice Session) 

Checkpoint Assessment-6 

Sessions 65 - 72

Lines and Angles

Identify Complementary and Supplementary Angles

Identify the Relationships Between Adjacent, and Linear Pairs of Angles

Relate Angles Formed by Intersection of Parallel Lines and Transversals

RDP Session(Revision, Doubt and Practice Session) 

Checkpoint Assessment-7 

Sessions 73 - 80

Triangles

Apply the Angle Sum Property and Exterior Angle Property of Triangles

Apply the Triangle Inequality

Apply the Pythagoras Property

RDP Session(Revision, Doubt and Practice Session) 

Checkpoint Assessment-8 

Sessions 81 - 84

Congruence of Triangles

Recognise Congruent Shapes and Relate Identical Parts of Congruent Triangles

Apply the Appropriate Criteria to Prove Congruence of Triangles

RDP Session(Revision, Doubt and Practice Session) 

Checkpoint Assessment-9 

Sessions 85 - 88

Constructions

Construct a Line Parallel to a Given Line

Construct Triangles with Given Sides and Angles

RDP Session(Revision, Doubt and Practice Session) 

Checkpoint Assessment-10 

Sessions 89 - 96

Algebra

Identify Variables, Coefficients, Like and Unlike Terms in an Expression

Distinguish Among Monomials, Binomials, Trinomials and Polynomials

RDP Session(Revision, Doubt and Practice Session) 

Add and Subtract Algebraic Expressions

Find the Values of Algebraic Expressions

RDP Session(Revision, Doubt and Practice Session) 

Checkpoint Assessment-11 

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Sessions 97 - 144



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Sessions 97 - 102



Simple Equations

- Frame Simple Equations and Identify Their Solutions
- Solve Simple Equations
- RDP Session(Revision, Doubt and Practice Session)** 
- Checkpoint Assessment-12** 

Sessions 103 - 111



Data Handling

- Find the Arithmetic Mean and Range of Ungrouped Data
- Find the Median and Mode of Ungrouped Data
- RDP Session(Revision, Doubt and Practice Session)** 
- Represent and Interpret Data Using Single and Double Bar Graphs
- Interpret the Meaning of Probability
- RDP Session(Revision, Doubt and Practice Session)** 
- Checkpoint Assessment-13** 

Sessions 112 - 122



Perimeter and Area

- Solve Contextual Problems on the Area and Perimeter of Squares and Rectangles
- Solve Problems on Area of Parallelograms and Triangles
- RDP Session(Revision, Doubt and Practice Session)** 
- Solve Problems on the Circumference of Circles
- Solve Problems on the Area of Circles
- Solve Problems on Area and Perimeter of Composite Shapes
- RDP Session(Revision, Doubt and Practice Session)** 
- Checkpoint Assessment-14** 

Sessions 123 - 127



Symmetry

- Identify and Find Mirror Images and Lines of Symmetry
- Identify Shapes That Have Rotational Symmetry and Find The Order of Symmetry
- RDP Session(Revision, Doubt and Practice Session)** 
- Checkpoint Assessment-15** 

Sessions 128 - 132



Solid Shapes

- Recap of Solid Shapes
- Relate 3D Objects with Their 2D Nets
- Identify the Cross Sections and Shadows of 3D Objects
- RDP Session(Revision, Doubt and Practice Session)** 
- Checkpoint Assessment-16** 

Sessions 133



Final Assessment

Sessions 134 - 144



Vedic Maths

- Multiplication trick of numbers just above 100
- Multiplication trick of numbers near 100
- Multiplication of numbers near to 20, 30, 40, 200, 300 & 400
- Multiplication by 11, 111, 1111, and so on
- Trick to multiply 2-digit numbers with some special numbers
- Multiplication by observation
- Finding the day of any date between 1900-1999
- Subtraction of numbers using Vinculum
- Square of numbers just near 10 and 100
- Magic with 5
- Multiplication table up to 99
- Pythagorean Triplet
- Division by 9 using addition
- Division by 8 using addition
- Answer check method of multiplication and division



Mental Ability/ Logical Reasoning

- Mirror and Water Images
- Calendar
- Sudoku
- Embedded Figures
- Inserting The Missing Character
- Seating Arrangement