



EXCEL
INTERNATIONAL

Course Name: Math Concept Booster

1. Course Module Structure

This course is divided into 10 structured modules designed to strengthen mathematical concepts, improve problem-solving skills, and enhance logical thinking. Each module focuses on building clarity through step-by-step explanations, practice exercises, and real-life applications of mathematical concepts.

2. Module, 3. Topic & 4. Module for 10

Module 1: Fundamentals of Mathematics

Topics:

- Number systems (natural, whole, integers, rational numbers)
 - Basic operations (addition, subtraction, multiplication, division)
 - Factors and multiples
 - Simplification techniques
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Module 2: Fractions, Decimals & Percentages

Topics:

- Understanding fractions and types
 - Conversion between fractions and decimals
 - Percentage concepts and calculations
 - Real-life applications (discounts, profit & loss basics)
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Module 3: Algebra Basics

Topics:

- Introduction to algebraic expressions
 - Variables and constants
 - Simplifying expressions
 - Basic equations and solutions
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Module 4: Advanced Algebra Concepts**Topics:**

- Linear equations
 - Polynomials and operations
 - Factorization techniques
 - Word problems in algebra
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Module 5: Geometry Fundamentals**Topics:**

- Basic shapes and properties
 - Lines, angles, and triangles
 - Perimeter and area
 - Coordinate geometry basics
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Module 6: Mensuration**Topics:**

- Area and perimeter of 2D shapes
 - Surface area and volume of 3D shapes
 - Practical applications
 - Problem-solving techniques
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Module 7: Trigonometry Basics**Topics:**

- Introduction to trigonometric ratios
 - Sine, cosine, and tangent
 - Basic identities
 - Applications in real life
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Module 8: Data Handling & Statistics

Topics:

- Collecting and organizing data
 - Mean, median, and mode
 - Graphs and charts
 - Interpretation of data
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Module 9: Logical Reasoning & Problem Solving

Topics:

- Analytical thinking
 - Pattern recognition
 - Puzzle-based learning
 - Mathematical reasoning techniques
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Module 10: Practice & Final Assessment

Topics:

- Mixed practice problems
- Model tests
- Time management strategies
- Final evaluation and performance analysis