



MathX

BY



GRADE 5 CURRICULUM



Aligned with CBSE
Curriculum

Grade 5 curriculum



Aligned with ICSE
Curriculum



Designed with International learning
Standards (IB & IGCSE) in mind

MathX
by



MathX Program – Grade 5

From Understanding Concepts to Mastering Thinking

At Nool and Numbers Academy, we nurture mathematical thinkers who can connect ideas, reason logically, and solve problems with confidence.

Our **MathX – Grade 5** program bridges the gap between foundational arithmetic and higher-order reasoning – preparing students for middle school and early competitive success.

By combining Academic Math, Real-Life Math, Logical Math, and Competitive Math, we help children strengthen their basics while exploring advanced applications of math in everyday life.

1. Academic Math – Strength Through Clarity

Our Academic Math syllabus for **Grade 5** deepens understanding of numbers, operations, and geometry, while introducing new topics like decimals, percentages, and simple algebra.

We ensure students don't just memorize formulas but truly understand how and why they work.

Syllabus Overview – Grade 5

Numbers and Numeration: Reading and writing numbers (up to 10,00,000), Place value (ones, tens, hundreds, thousands, ten-thousands, lakhs), Comparing, ordering, and rounding numbers, Even and odd numbers, Expanded form and standard form

Basic Operations: Addition and subtraction (up to 6-digit numbers), Word problems (real-life situations), Multiplication: multi-digit numbers, properties of multiplication, Division: long division, remainder, word problems

Fractions and Decimals: Fractions: addition, subtraction, multiplication with whole numbers, Decimals: tenths, hundredths, thousandths; addition and subtraction, Conversion between fractions and decimals, Comparing and ordering fractions and decimals

Geometry: 2D shapes: polygons, quadrilaterals, circle, triangle, rectangle, square, 3D shapes: cube, cuboid, sphere, cylinder, cone, prism, Lines: parallel, perpendicular, intersecting, Angles: acute, right, obtuse; measuring angles, Symmetry, reflection, rotation, position, and direction

Measurement: Length: cm, m, km, Weight: g, kg, Capacity: ml, litre, Time: reading clock, calendar, conversion, Perimeter and area of squares, rectangles, triangles

Money: simple and multi-step word problems

Patterns and Number Sequences: Number patterns, skip counting, multiplication patterns, Odd-even patterns, Shape and colour patterns

Data Handling: Collecting and recording data, Pictographs, bar graphs, interpreting data, Simple probability concepts (basic)

Outcome: Builds a solid understanding of numbers, operations, and relationships — preparing children for middle school and logical problem-solving.

2. Real-Life Math - Math in Action



Children explore how math works beyond the classroom — in shopping, budgeting, recipes, travel, and even nature!

Real-Life Math helps students see how fractions, percentages, and measurements apply to real-life problems, developing confidence to use math in practical decisions

Outcome: Connects classroom learning to everyday experiences — making math useful, relevant, and fun.

3. Logical Math - Sharpening Reasoning Power

MathX for Grade 5 enhances logical and analytical power through stimulating challenges designed by a team of math professionals. Students engage with topics like alphabet series, coding-decoding, Venn diagram logic, number analogy, visual patterns, and arithmetic reasoning.



Outcome: Develops logical reasoning, critical thinking, and analytical ability — essential for Olympiads and higher studies.

4. Competitive Math - The Next Level of Challenge



Our Competitive Math section trains students to approach math with strategy and speed.

They solve Olympiad-style problems covering topics like number patterns, logical reasoning, and application-based questions.

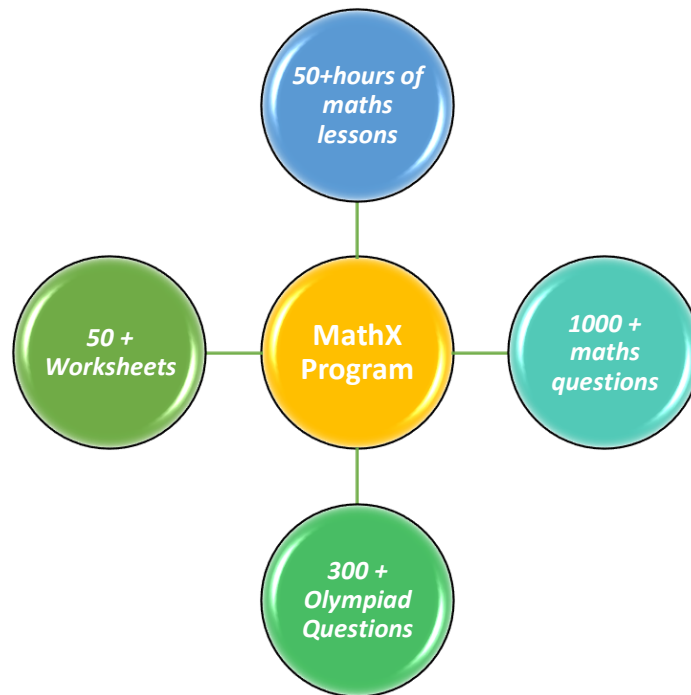
Timed drills, math games, and challenge rounds boost confidence, accuracy, and speed.

This program serves as a stepping stone toward Olympiads, NTSE, and later exams like JEE by building early problem-solving stamina and strategy.

Outcome: Builds a strong mathematical mindset, faster calculation skills, and confidence to tackle non-routine problems.

Why Choose MathX - Grade 5?

- ✓ Strengthens upper-primary math foundation
- ✓ Builds conceptual clarity in decimals, fractions, and ratios
- ✓ Enhances logical reasoning and analytical skills
- ✓ Prepares students for Olympiads and future competitive exams
- ✓ Encourages curiosity and confidence through real-life learning



How Our MathX Program Work?



1:1 Personal Attention



Interactive live sessions
- not recorded



Logical thinking & Problem Solving focus



Expert Teacher for every subject



Affordable & Flexible timings

Our Teaching Methodology

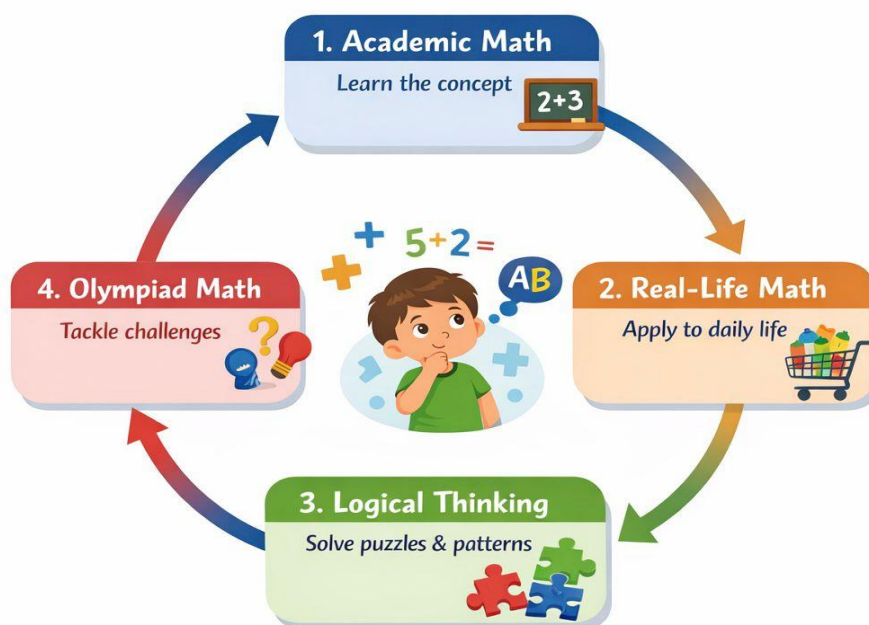
MathX follows an Integrated Learning Model where every concept is taught in four connected layers:

- ✓ Academic Understanding - Concept clarity aligned with school curriculum
- ✓ Real-Life Application - Connecting math to everyday experiences
- ✓ Logical Reasoning - Developing thinking and observation skills
- ✓ Olympiad Exposure - Encouraging advanced and creative problem-solving

Each topic is completed only after the child demonstrates understanding across all four layers.

How We Teach MathX

One Concept – Four Ways of Learning!



Understand • Apply • Think • Achieve!

In a Simple Way:

"We always teach Academic Math first.

Once the child understands the concept clearly, we immediately apply the same topic in three ways:

- ✓ Real-life situations
- ✓ Logical thinking activities
- ✓ Olympiad-style questions

For example, when we teach addition:

- ✓ First, we teach how to add numbers properly
- ✓ Then we show how addition is used in daily life (shopping, toys, money)
- ✓ Then we give thinking-based and Olympiad-style questions on the same addition

This way, children don't just learn 'how to do', they understand why and where to use it."

At Nool and Numbers Academy: Where Young Minds Learn to Think, Reason, and Lead in Math...!