MathX

BY

Nool and Numbers Academy

Endless Learning

GRADE 6 CURRICULUM

Aligned with CBSE Curriculum

Aligned with ICSE Curriculum

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

Grade 6 curriculum

MathX by

MathX Program – Grade 6

From Learning Concepts to Applying Logic

At Nool and Numbers Academy, we empower students to move beyond routine math and start thinking like problem solvers.

Our **MathX – Grade 6** program bridges the gap between primary and middle school math, encouraging learners to understand, analyze, and apply concepts independently.

Through Academic Math, Real-Life Math, Logical Math, and Competitive Math, students not only master new topics — they develop reasoning, accuracy, and confidence that prepare them for Olympiads and advanced studies ahead.

1. Academic Math – Concept Clarity with Depth

The Academic Math curriculum for **Grade 6** strengthens arithmetic fluency and introduces formal algebra, geometry, and data handling.

We focus on visual understanding, pattern recognition, and application-based problem-solving.

Syllabus Overview – Grade 6

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 strong understanding of numbers, algebra, and geometry — preparing students for higher math with logical clarity and precision.*

2. Real-Life Math – Connecting Math to Meaning

Students explore how math applies to real-world contexts — from calculating travel time and shopping discounts to understanding areas and volumes in design and space.

Real-Life Math activities make every topic relevant, helping students see the usefulness of math in planning, problem-solving, and smart decision-making.

Outcome: *Makes learning purposeful, relatable, and fun by linking school concepts to everyday life.*

3.Logical Math – Building Smart Thinkers

MathX for Grade 6 blends reasoning with strategy, featuring advanced exercises curated by expert educators. Students explore direction puzzles, blood relations, logical sequences, number ranking, mathematical patterns, and mind math shortcuts.

The program develops systematic problem-solving approaches and strengthens logical interpretation — perfect for students aiming for Olympiads and advanced-level math mastery.

Outcome: *Improves logical reasoning, analytical ability, and lateral thinking — vital for academic and competitive success.*

4. Competitive Math – Foundation for Olympiads

Our Competitive Math program sharpens problem-solving speed and accuracy through Olympiad-style practice, weekly challenges, and application-based reasoning questions.

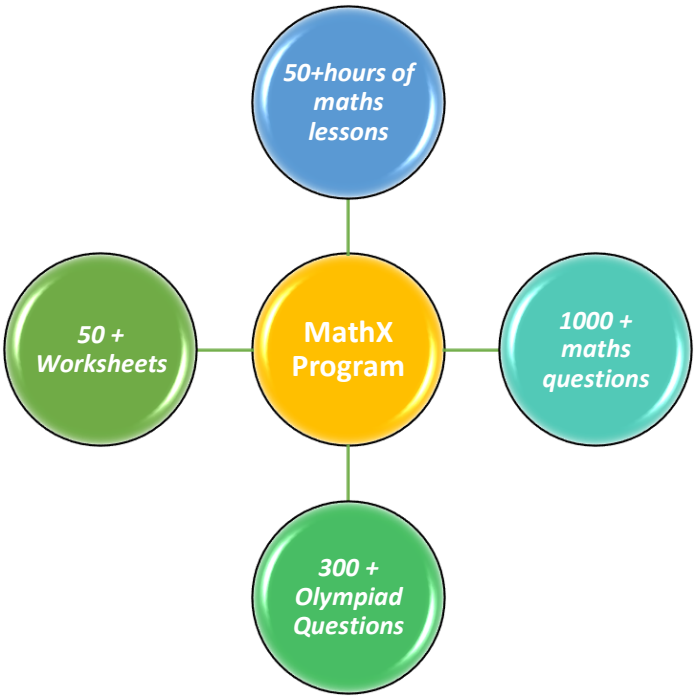
Students are introduced to advanced-level topics like number theory, geometry puzzles, and algebraic reasoning.

They also learn to manage time effectively and apply strategies for multiple-choice problem solving.

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

Why Choose MathX – Grade 6?

- ✅ Strengthens middle school math foundations
- ✅ Builds conceptual clarity in algebra, geometry & mensuration
- ✅ Encourages logical & analytical thinking
- ✅ Prepares for Olympiad and competitive math early
- ✅ Connects learning to practical, real-world applications



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.

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 Learners Build Logic, Confidence, and Excellence in Math…!*