



Level M Courses

Areas covered:

Advanced Arithmetic / Revision of Pre-Algebra / Algebra / Geometry

Level M1

- Divisibility Rules
- Introduction to Probability Techniques including Counting and Casework
- Binomial Theorem and its application
- LCM/GCF and their Application including Euclidean Algorithm
- Problem Solving Strategies - 1

Level M2

- Application of Absolute Values
- Logical Reasoning – Arguments and Explanations
- Multiples and Divisibility Tests
- Introduction to Modular Arithmetic
- Functions and Pigeonhole Principle

Level M3

- Order of Operations
- Area of Polygon – including Pick's Theorem
- Elements of Geometry – Classification of Triangles
- Squares, Square Roots and Arithmetic with Square Roots
- Problem Solving Strategies - 2

Level M4

- Fractions and Operations with Fractions
- Advanced Probability
- Counting as Arithmetic
- Last Digits and Remainder Calculations
- Circles, Polygons - Perimeter and Area

Level M5

- Applicability of Pythagorean Theorem
- Similar Triangles and Quadrilaterals
- Equalities and Inequalities
- Statistics and its fundamentals
- Problem Solving Strategies - 3

Level M6

- Tables, Graphs and Charts
- Lines and Linear Equations
- Systems of Two-Variable Equations
- Multiple Variables
- Introduction to Inequalities, Graphing

Level M7

- Quadratic Equations
- Factorization Techniques
- Complex Numbers
- Venn Diagram
- Logical Reasoning
- Problem Solving Strategies - 4

Level M8

- Permutations and Combinations
- Pascal's Triangle and Hockey Stick Identity
- Systems of Two-Variable Equations
- Base Number Arithmetic
- Multiplicative Inverse and Solving Linear Congruencies

Level M9

- Quadratic Formula and Graphing Quadratics
- Functions and Graphing Functions
- Polynomials and Exponential Functions
- Sequences and Series
- Angle Bisectors and Medians