Level E Courses

Areas covered:

Number Theory / Arithmetic / Pre-Algebra / Elements of Geometry

Level E1

- Introduction to Primes and Prime Factorizations
- Multiples and Divisibility Rules
- Basic Equations and Introduction to Inequalities
- Least Common Multiples and Greatest Common Factors
- Ratios and Proportions

Level E2

- Introduction to Permutations and Combinations
- Elements of Geometry – Angles and Polygons
- Order of Operations
- Introduction to Pythagorean Theorem
- Problem Solving Strategies

Level E3

- Set Theory – Venn Diagrams
- Number Properties and Facts – Beginning
- Application of Permutations and Combinations
- Mean, Median, Mode and Range
- Problem Solving Strategies

Level E4

- Place Values and its application
- Fractions and Operations with Fractions
- Exponents
- Scientific Notations
- Distance, Speed, Rate and Time

Level E5

- Equalities and Inequalities
- Elements of Geometry – Triangles and their Classification
- Percentages, Increase and Decrease of Percentages
- Applicability of Pythagorean Theorem
- Problem Solving Strategies

Level E6

- Combinatorial Identities
- Pascal's Triangle and Hockey Stick Identity
- Introduction to Binomial Theorem
- Advanced Counting Techniques
- Introduction to Base Numbers

Level E7

- Combinatorial Identities
- Last Digits and Remainder Calculations
- Factors and Methods of Factoring
- Advanced Counting Techniques
- Circles, Polygons - Perimeter and Area

Level E8

- Application of Absolute Values
- Fractions and Operations with Fractions
- Fundamentals of Statistics
- Introduction to Venn Diagrams
- Area Calculation

Level E9

- Introduction to Binomial Theorem
- Absolute Values
- Base Numbers and Conversions
- Sequences and Series
- Problem Solving Strategies