

Aryabhatta National Maths Competition - 2023

Syllabus - Class 7

Time & Work

- Problem on time & work calculation
- Finding Number Of Days From One Date To Another
- Railway And Air Timings
- Time Intervals

HCF & LCM

- Hcf
- Lcm
- Prime Factorisation
- Hcf By Prime Factorisation
- Lcm By Prime Factorisation
- Lcm By Division Method

Percentages

- Expressing Fractions As Percentages
- Converting Percentages To Fractions
- Expressing Percentages As Decimals
- Expressing Decimals As Percentages
- Finding Percentage Of A Number
- Money And Metric Measures As Percentages
- Why Do We Use Percentages?

Area And Volume

- Area
- Finding Area When Whole Squares Are Not Covered
- Area Of Irregular Shapes
- Area Of A Rectangle Or Square
- Finding Length Or Breadth
- Perimeter

- Volume
- Volume Of A Cube
- Volume Of A Cuboid

Algebraic Expression

- Introduction
- How Are Expressions Formed?
- Terms Of An Expression
- Like And Unlike Terms
- Monomials, Binomials, Trinomials And Polynomials
- Addition And Subtraction Of Algebraic Expressions
- Finding The Value Of An Expression
- Using Algebraic Expressions Formulas And Rules

Perimeter And Area

- Introduction
- Squares And Rectangles

- Area Of A Parallelogram
- Area Of A Triangle
- Circles
- Conversion Of Units
- Applications

Ratio And Proportion

- Introduction
- Ratio
- Proportion
- Unitary Method

Profit And Loss

- Profit And Loss
- Finding Selling Price
- Finding Cost Price
- Perimeter