

TOPICS TO STUDY FOR MATHCON

- ❖ The following topics provide a framework for MathCON.
- ❖ These topics are not curriculum.
- ❖ It is recommended that students review previous grade topics.
- ❖ Any grade level's topics are related to the previous grade level and promote continuous improvement over the years.
- ❖ A MathCON test consists of multiple-choice questions covering the following topics:
Algebra, Geometry, Number Theory, and Combinatorics
- ❖ There could be questions from different topics that aren't listed below at MathCON.

TOPICS TO STUDY FOR MATHCON

5TH GRADE MATH

- ❖ Numerical expressions
- ❖ Pattern of numbers (sequences) and shapes
- ❖ Ordered pairs
- ❖ Place Value
- ❖ Convert between standard and expanded form
- ❖ Operations with decimal numbers and comparing decimal numbers
- ❖ Rounding decimal numbers
- ❖ Operations with fractions and comparing fractions
- ❖ Compare decimals and fractions
- ❖ Scientific notation
- ❖ Powers of ten
- ❖ Understanding and evaluating exponents
- ❖ Divisibility rules
- ❖ Prime and composite numbers
- ❖ Greatest common factor
- ❖ Least common multiple
- ❖ Multi-step word problems involving
- ❖ Venn diagrams
- ❖ Convert between percents, fractions, and decimals
- ❖ Percent of a number
- ❖ Graph points on a coordinate plane
- ❖ Evaluate variable expressions
- ❖ Data and graphs
- ❖ Mean (average), mode, median, range problems
- ❖ Two-dimensional figures
- ❖ Triangles and quadrilaterals
- ❖ Word Problems
- ❖ Inequalities

TOPICS TO STUDY FOR MATHCON

- ❖ Exponential Numbers, powers of 2, 3, 5
- ❖ Sum of finite number of numbers
- ❖ Division Algorithm, Remainder, Divisibility Rules
- ❖ Two-Step Equations, Rules for Table of Values
- ❖ Perimeter, Area, volume
- ❖ Odd Number, Even Number problems