

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

6TH GRADE MATH

- ❖ Ratios and proportional relationships
- ❖ Rate
- ❖ Diagrams and equations
- ❖ Percent
- ❖ Convert between percents, fractions, and decimals
- ❖ Convert measurement units
- ❖ Operations with rational numbers and comparing rational numbers
- ❖ Greatest common factor
- ❖ Least common multiple
- ❖ Reflection, rotation, and translation
- ❖ Integers
- ❖ Number line
- ❖ Coordinate plane
- ❖ Absolute value of rational numbers
- ❖ Distances between points
- ❖ Numerical expressions
- ❖ Exponents
- ❖ Equations
- ❖ Equations and inequalities
- ❖ Dependent and independent variables
- ❖ Triangles
- ❖ Quadrilaterals
- ❖ Polygons
- ❖ Volume of a prism
- ❖ Surface area of figures
- ❖ Nets of three-dimensional figures
- ❖ Data, graphs and statistics
- ❖ Dot plots, bar graphs, line graphs, histograms, and box plots.

TOPICS TO STUDY FOR MATHCON

- ❖ Stem-and-leaf plots
- ❖ Mean (average), mode, median, range problems
- ❖ Data distribution
- ❖ Interquartile range and outliers
- ❖ Absolute deviation
- ❖ Word problems
- ❖ Probability