

MATHEMATICS YEAR-VII

Algebra

- Translate a phrase into numerical or algebraic expression
- Solve integer equations using addition and subtraction and multiplication and division
- Solve two-step integer equations
- Solve word problems by writing and solving equations

Geometry

- Related angles: Complementary angles, Supplementary angles, vertically opposite angles
- Identify and discriminate between regular and irregular polygons
- Solve problems involving translations, rotations and reflections
- Identify congruent polygons and their corresponding sides and angles
- Construct congruent segments and angles as well as angle bisectors or segment bisectors
- Apply properties of similar triangles
- Solve problems involving similar polygons
- Identify congruent triangles according to corresponding parts
- Find the missing angle measurement in a triangle when two angles are known

Integers

- Properties of Integers
- Properties of addition and subtraction of integers
- Multiplication of integers
- Properties of multiplication of integers
- Division of integers
- Properties of division of integers

Probability and Statistics

- Compute probability outcomes for dependent events
- Use the counting principle to determine probability
- Create and interpret a stem and leaf plot
- Solve problems involving arrangements


Fractions

- Revision of fractions, Proper fractions and Improper fractions, addition and subtraction of fractions.
- Multiplication of fractions.
- Division of fractions
- How well have we learned about decimals?
- Multiplication of Decimal numbers
- Division of decimal numbers



Data Handling

- Collecting data
- Organization of data
- Representative values, mean, mode, median
- Use of bar graphs with a different purpose, chance and probability



Problem Solving

- Word problems involving customary and metric measurement
- Simple interest problems using amount \times rate \times time
- Word problems involving distance, rate and time
- Word problems using proportional reasoning
- Geometry problems by making a drawing or diagram