

RINGWOOD PUBLIC SCHOOLS

WHAT EVERY STUDENT SHOULD KNOW BY THE END OF EIGHTH GRADE – MATH

Algebra

- Identify the least common multiple and greatest common factor of algebraic expressions.
- Solve one and two step equations.
- Solve one and two step inequalities.
- Graph equations.
- Combine like terms.
- Write equations from word problems.
- Evaluate expressions.
- Slope and y-intercept.

Number Sense, Numeration, and Numerical Operations

- Develop probability fractions from a given event.
- Probability: predict outcomes of two mutually exclusive/inclusive events.
- Solve problems using percent proportions.
- Solve percent problems mentally.
- Solve problems using compound percents – appreciation/depreciation.
- Solve real-life problems using discounts or mark-ups.
- Solve problems using proportions.
- Give open-ended responses.
- Analyze multiple situations to select most favorable outcome.
- Use networks to solve word problems.
- Solve minimum/maximum problems involving networks.

Spatial Sense, Measurement, and Geometry

- Find the area of irregular figures and many-sided polygons.
- Calculate volume.
- Calculate area, circumference, diameter and radius of circles.

Patterns, Relationships, Functions

- Solve word problems using patterns and pictures.
- Identify and expand sequences.

Data Probability Statistics

- Frequency tables, line of best fit
- Interpret probabilities into ratios and percents.
- Compare experimental vs. theoretical probability.
- Predict outcome by determining probability of given events (example: dice, spinners, marbles, etc.).