

RINGWOOD PUBLIC SCHOOLS

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

Number Sense, Numeration, and Numerical Operations

- Solve problems using order of operations.
- Express numbers in exponential form, scientific notation, and expanded form.
- Use calculators for complex computations.
- Examine logic problems.
- Find square roots.
- Understand percents (larger than 100% and smaller than 1%).
- Solve problems with percents.
- Explore ratio, proportion, and equivalency.
- Use calculators to solve problems with fractions, mixed numbers, and square roots.

Spatial Sense, Measurement, and Geometry

- Calculate area and circumference of circles.
- Calculate area of regular polygons.
- Measure with rulers and protractors.
- Explore Pythagorean theorem with calculators.

Patterns, Relationships, Functions

- Use variables to represent quantities.
- Locate and identify coordinate points.
- Recognize sequences and predict subsequent terms.
- Use patterns to solve problems.
- Solve one-step equations.

Data, Probability, and Statistics

- Make and interpret charts and graphs to solve problems.
- Solve network problems.
- Analyze data using mean, median, mode and range.
- Determine probability of events (example: flipping coins, spinners, dice, etc.).