

Mathematics RIT Score 270 – above

Number Sense and Operations

Fractions

- Multiply a mixed number by a whole number, fraction, or mixed number

New Vocabulary in this range:

none

New Signs and Symbols:

none

Exponents and Scientific Notation

- Evaluate power of zero
- Identify the lowest common multiple of numbers in their prime factored state

Set Notation

- Use inequalities to represent set notation

New Vocabulary in this Range:

none

New Signs and Symbols:

none

Patterns, Functions, and Algebra

Solving Equations and Inequalities, Simplifying Expressions, Order of Operations

- Identify the region defined by a linear inequality

New Vocabulary in this Range:

none

New Signs and Symbols:

none

Measurement

Length, Weight, Volume

- Find volume of cylinder using knowledge of radius versus diameter

Area, Perimeter, Circumference

- Solve problem using ratio of rectangular areas

Money

- Solve problem given two discounts

New Vocabulary in this Range:

rate of interest, successive discounts

New Signs and Symbols:

none

Geometry and Spatial Sense

Congruency and Similarity

- Prove that triangles and other polygons are congruent or similar using algebraic, coordinate, and deductive proofs

Symmetry and Transformations

- Solve problems involving volume with rotational transformation

Geometric Properties and Terminology

- Identify number of diagonals of regular polygons
- Informally prove relationships between angles in polygons by using properties of complementary, supplementary, vertical, and exterior angles

New Vocabulary in this Range:

HL

New Signs and Symbols:

none

Data Analysis, Statistics, and Probability

Combinations and Permutations

- Perform complex combinations in problem solving situations

Graphing

- Determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures and solids

New Vocabulary in this Range:

none

New Signs and Symbols:

none

Problem Solving

New Signs and Symbols:

none

- Solve problems involving successive discounts and rate of interest

New Vocabulary in this Range:

none