

MT055 Pre-Algebra

Local Course Outline

- I. Whole Numbers
 - A. Basic Operations
 - 1. Addition
 - 2. Subtraction
 - 3. Multiplication
 - 4. Division
 - B. Powers and Square Roots
 - C. Order of Operations
 - D. Rounding and Estimation
 - E. Primes and Factors
 - 1. Divisibility Tests
 - 2. Prime Factorization
 - 3. Least Common Multiples
 - F. Real World Applications

- II. Fractions
 - A. Basic Operations
 - B. Orders of Operations
 - C. Equivalency
 - D. Comparisons
 - E. Real World Applications
 - F. Powers and Square Roots

- III. Decimal Fractions and Percents
 - A. Basic Operations
 - B. Order of Operations
 - C. Conversions and Comparisons
 - D. Rounding and Estimation
 - E. Real World Applications

- IV. Ratios and Proportions
 - A. Simplifying Ratios
 - B. Solving Proportions
 - C. Real World Applications

- V. Signed Number Arithmetic
 - A. Basic Operations
 - B. Properties of Real Numbers
 - C. Powers
 - D. Order of Operations

- E. Comparisons
- F. Real World Applications
- VI. Basic Formulas
 - A. Perimeter of basic plane figures
 - B. Area of basic plane figures
 - C. Volume of basic geometric solids
- VII. English and Metric Measurement
 - A. Conversions within each measurement system
 - B. Conversions interchanging English and Metric systems
- VIII. Tables and Graphs
 - A. Reading data
 - B. Displaying data
 - C. Interpreting data
- IX. Algebraic Expressions
 - A. Vocabulary
 - B. Simplification
 - a. Combining Like Terms
 - b. Distributive Property
 - C. Evaluation
- X. Linear Equations
 - A. Vocabulary
 - B. Equivalent Equations
 - 1. By addition property
 - 2. By multiplication property
 - 3. Equations of the form $ax + b = cx + d$
 - C. Checking the Answer