MT055 – PRE-ALGEBRA
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

Local Outline  Approved by M&S Division  2/17/2006
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