

Math 900 Course Topics (Revised 8/17/2011)

*Basic College Mathematics, Tobey/Slater/Blair, 6th ed
Pearson Co. 2008*

- Categories:
1. Must be covered.
 2. Must be covered at least briefly.
 3. Do not cover unless you have extra time after adequately doing 1 and 2.

Rationale on Revision: Starting Fall 2011, we shorten the list of topics that are covered in Math 900 with the hope that there will be more time to cover the basic arithmetic materials so that students will acquire a stronger foundation in order to enroll in Math 902 the following semester. The two major topics that are re-categorized to 3 are **Signed Numbers** (except a brief introduction) and **Equation Solving** which are covered substantially in Math 902.

The changes are highlighted in YELLOW.

<u>Category</u>	<u>Section</u>	<u>Topic</u>
1	1.1	Understanding Whole Numbers
1	1.2	Adding Whole Numbers
1	1.3	Subtracting Whole Numbers
1	1.4	Multiplying Whole Numbers
1	1.5	Dividing Whole Numbers
1	1.6	Exponents and the Order of Operations
1	1.7	Rounding and Estimating
1	1.8	Solving Applied Problems Involving Whole Numbers
1	2.1	Understanding Fractions
1	2.2	Simplifying Fractions
1	2.3	Converting Between Improper Fractions and Mixed Numbers
1	2.4	Multiplying Fractions and Mixed Numbers
1	2.5	Dividing Fractions and Mixed Numbers
1	2.6	The Least Common Denominator and Creating Equivalent Fractions
1	2.7	Adding and Subtracting Fractions
1	2.8	Adding and Subtracting Mixed Numbers and the Order of Operations
1	2.9	Solving Applied Problems Involving Fractions
1	3.1	Using Decimal Notation
1	3.2	Comparing, Ordering, and Rounding Decimals
1	3.3	Adding and Subtracting Decimals
1	3.4	Multiplying Decimals
1	3.5	Dividing Decimals
1	3.6	Converting Fractions to Decimals and the Order of Operations
1	3.7	Estimating and Solving Applied Problems Involving Decimals
1	4.1	Ratio and Rates
1	4.2	The Concept of Proportions
1	4.3	Solving Proportions Solving Applied Problems Involving Proportions

1	4.4	
1	5.1	Understanding Percent
1	5.2	Converting Between Percents, Decimals, and Fractions
1	5.3A	Solving Percent Problems Using Equations
1	5.3B	Solving Percent Problems Using Fractions
1	5.4	Solving Applied Percent Problems
2	5.5	Solving Commission, Percent Increase or Decrease and Interest Problems
1	6.1	American Units
1	6.2	Metric Measurements: Length
1	6.3	Metric Measurements: Volume and Weight
1	6.4	Converting Units
1	6.5	Solving Applied Measurement Problems
3	7.1	Angles
1	7.2	Rectangles and Squares
3	7.3	Parallelograms, Trapezoids, and Rhombuses
2	7.4	Triangles
3	7.5	Square Roots
3	7.6	The Pythagorean Theorem
±2	7.7	Circles
2	7.8	Volume
3	7.9	Similar Geometric Figures
3	7.10	Solving Applied Problems Involving Geometry
3	8.1	Circle Graphs
3	8.2	Bar Graphs and Line Graphs
3	8.3	Histograms
3	8.4	Mean, Median, and Mode
1	Handout	Introduction to Signed Numbers
±3	9.1	Adding Signed Numbers
±3	9.2	Subtracting Signed Numbers
±3	9.3	Multiplying and Dividing Signed Numbers
±3	9.4	Order of Operations with Signed Numbers
±3	9.5	Scientific Notation
3	10.1	Variables and Like Terms
3	10.2	The Distributive Property
±3	10.3	Solving Equations Using the Addition Property
±3	10.4	Solving Equations Using the Division or Multiplication Property
±3	10.5	Solving the Equations Using Two properties
3	10.6	Solving Applied Problems