

Portable Assisted Study Sequence Math 6A

SCOPE OF COURSE

This course is divided into two semesters of Study (A & B) comprised of five units each. The first-semester (A) is a study of whole number and integers: rational numbers; statistics; probability and measurement; and geometric figures.

SEQUENCE OF SKILLS

UNIT 1 – Whole numbers and Integers

1. Working with Place Value
2. Integers and Absolute Value
3. Addition and Subtraction with Integers
4. Multiplication with Integers
5. Dividing Integers
6. Exponents
7. Order of Operations
8. Properties of Addition and Multiplication
9. Special Properties
10. Prime Factorization
11. The Least Common Multiple (LCM)
12. The Greatest Common Factor (GCF)
13. Estimation and Mental Math
14. Review and Problem Solving

UNIT 2 – Rational Numbers

1. Rational Numbers: Fractions
2. Equivalent Fractions
3. Addition and Subtraction with Fractions
4. Multiplication and Division with Fractions
5. Mixed Numbers
6. Adding and Subtracting Mixed Numbers
7. Multiplying and Dividing Mixed Numbers
8. Decimals
9. Converting Fractions to Decimals
10. Adding and Subtracting Decimals
11. Multiplying and Dividing Decimals
12. Scientific Notation
13. Percentage
14. Review and Problem Solving

UNIT 3 – Statistics

1. Collecting Data
2. Pie Graphs
3. Organizing Information: Frequency Tables

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4. Stem-and-Leaf plots
5. Bar Graphs
6. Pictographs
7. Histograms
8. Range, Mode, Mean, and Median
9. Box-and-Whisker Plots
10. Graphing Coordinates
11. Line Graphs
12. Scatter Plots
13. Using the Appropriate Data Display
14. Review and Problem Solving

UNIT 4 – Probability and Measurement

1. Sets and Sample Spaces
2. Theoretical Probability: Simple Experiments
3. Tree Diagrams
4. Compound Probabilities
5. This then That: Dependent Events
6. A Deck of Cards and Dice
7. Theoretical vs. Experimental Probability
8. Standard Measurement
9. Metric Units
10. Tools of Measurement
11. Units of Time
12. Introduction to Angles
13. Operations with Measurements
14. Review and Problem Solving

UNIT 5 – Geometric Figures

1. Classifying Angles
2. Properties of Parallel Lines
3. Quadrilaterals
4. Area and Perimeter of Quadrilaterals
5. Triangles
6. Area of Triangles
7. Regular and Irregular Polygons
8. Area and Perimeter of Polygons
9. Congruent and Similar Polygons
10. Introduction to Circles
11. Circumference and Area
12. 3-Dimensional Shapes
13. Volume and Surface Area
14. Review and Problem Solving