



**Switched-On**  
SCHOOLHOUSE

# Course Catalog

GED Prep Mathematics

## Table of Contents

UNIT 1: OPERATIONS WITH NUMBERS .....	1
UNIT 2: STATISTICS .....	1
UNIT 3: PRE-ALGEBRA .....	1
UNIT 4: ALGEBRA I: QUADRATIC EQUATIONS .....	1
UNIT 5: GEOMETRY .....	2
UNIT 6: FORMULAS AND GEOMETRY .....	2
UNIT 7: STATISTICS, GRAPHS, AND PROBABILITY .....	2
UNIT 8: GEOMETRY: ANGLES AND PARALLELS .....	2

UNIT 1: OPERATIONS WITH NUMBERS	
GED PREP MATHEMATICS	<b>Assignment Titles</b>
	1. Operating on Whole Numbers
	2. Basic Operations and Rounding
	3. Multiplying and Dividing Whole Numbers
	4. Quiz 1 : WORKING WITH WHOLE NUMBERS
	5. Fractions, Averages, and Graphs
	6. Picture, Bar, and Pie Charts
	7. Project: Graph*
	8. Quiz 2 : FRACTIONS, AVERAGES, AND GRAPHS
	9. Adding and Subtracting Fractions
	10. Multiplying Mixed Numbers
	11. Dividing Mixed Numbers
	12. Quiz 3: FRACTIONS AND MIXED NUMBERS
	13. Adding and Subtracting Decimals
	14. Multiplying Decimals
	15. Dividing Decimals and Rounding Numbers
	16. Quiz 4: WORKING WITH DECIMALS
	17. Patterns and Number Sequences
	18. Rounding and Missing Number Problems
	19. Problem Solving
	20. Quiz 5: PATTERNS AND NUMBER SEQUENCES
	21. Special Project*
	22. Test
	23. Alternate Test*
24. Reference	

UNIT 2: STATISTICS	
GED PREP MATHEMATICS	<b>Assignment Titles</b>
	1. Place Value, Order, and Rounding
	2. Central Tendency, Ratios, and Proportions
	3. Problem Solving Strategies
	4. Quiz 1: WHOLE NUMBERS, NUMBER CONCEPTS
	5. Geometric Properties
	6. Sets
	7. Number Systems and Factorization
	8. Quiz 2: GEOMETRIC FIGURES
	9. Operating on Fractions and Decimals
	10. Base, Rate, and Percentage
	11. Percentages and Averages
	12. Quiz 3: FRACTIONS
	13. Formula Review
	14. Solving Equations
	15. Ratios and Proportions
	16. Different Types of Statistics
	17. Quiz 4: FORMULAS, RATIOS, STATISTICS, AND GRAPHS
	18. Special Project*
	19. Test
	20. Alternate Test*
21. Reference	

UNIT 3: PRE-ALGEBRA	
GED PREP MATHEMATICS	<b>Assignment Titles</b>
	1. Integers, Absolute Value, and Cartesian Planes
	2. Adding and Subtracting Integers
	3. Multiplying Integers
	4. Dividing Integers
	5. Algebraic Expressions and Variables
	6. Expressions, Variables, and Exponents
	7. More Expressions, Variables, and Exponents
	8. Graphing Algebraic Sentences
	9. Quiz 1: PRE-ALGEBRA REVIEW
	10. Geometric Formulas and Square Roots
	11. Area and Volume
	12. Commutative and Associative Properties
	13. Solving Equations
	14. Applications
	15. Quiz 2: PRE-ALGEBRA REVIEW
	16. Special Project*
	17. Test
	18. Alternate Test*
19. Reference	

UNIT 4: ALGEBRA I: QUADRATIC EQUATIONS	
GED PREP MATHEMATICS	<b>Assignment Titles</b>
	1. Quadratic Equations
	2. Methods of Solving Quadratic Equations
	3. The Quadratic Formula
	4. Verbal Problems
	5. Quiz 1: QUADRATIC EQUATIONS
	6. Review of Algebra (Part 1)
	7. Review of Algebra (Part 2)
	8. Quiz 2: REVIEW OF ALGEBRA (PART 1)
	9. Review of Algebra (Part 3)
	10. Review of Algebra (Part 4)
	11. Quiz 3: REVIEW OF ALGEBRA (PART 2)
	12. Unit 4 Special Project*
	13. Test
	14. Alternate Test*
15. Reference	

UNIT 5: GEOMETRY	
GED PREP MATHEMATICS	<b>Assignment Titles</b>
	1. Introduction to Lines, and Angles
	2. Using a Protractor
	3. Quiz 1: SEGMENTS, LINES, AND ANGLES
	4. Triangle Terms
	5. Perimeter and Area of Triangles
	6. Quiz 2: TRIANGLES
	7. Perimeter and Area of Squares and Rectangles
	8. Parallelograms, Trapezoids, and Formulas
	9. Quiz 3: QUADRILATERALS
	10. Circles
	11. Hexagons
	12. Quiz 4: CIRCLES AND HEXAGONS
	13. Ratio Review
	14. Proportion Review
	15. Similar Figures and Scale Drawings
	16. Quiz 5: GEOMETRIC RATIOS
	17. Special Project*
	18. Test
	19. Alternate Test*
20. Reference	

UNIT 6: FORMULAS AND GEOMETRY	
GED PREP MATHEMATICS	<b>Assignment Titles</b>
	1. Area, Perimeter, and Square Roots
	2. Circumference and Area of Circles
	3. Triangle, Pythagorean Theorem
	4. Types of Quadrilaterals
	5. Quiz 1: FORMULAS AND GEOMETRY
	6. Rectangular Solids
	7. Pyramids and Prisms
	8. Quiz 2: FORMULAS AND GEOMETRY
	9. Solid Figures
	10. Using a Calculator to Determine Geometric Measures
	11. Translations
	12. Quiz 3: FORMULAS AND GEOMETRY
	13. Special Project*
	14. Test
	15. Alternate Test*
16. Reference	

UNIT 7: STATISTICS, GRAPHS, AND PROBABILITY	
GED PREP MATHEMATICS	<b>Assignment Titles</b>
	1. Statistics: Mean
	2. Median and Mode
	3. Average Deviation and Range
	4. Quiz 1: STATISTICS, GRAPHS, AND PROBABILITY
	5. The Pictograph and Bar Graph
	6. Line Segment Graph, Histogram, and Frequency Polygon
	7. More About Bar Graphs and Line Segment Graphs
	8. Number Patterns and Functions
	9. Coordinate Graphs
	10. Quiz 2: STATISTICS, GRAPHS, AND PROBABILITY
	11. Special Project*
	12. Test
	13. Alternate Test*
14. Reference	

UNIT 8: GEOMETRY: ANGLES AND PARALLELS	
GED PREP MATHEMATICS	<b>Assignment Titles</b>
	1. Angle Definitions
	2. Angle Measurement
	3. Quiz 1: Angles
	4. Relationship Definitions
	5. Angle Relationship Theorems (1)
	6. Angle Relationship Theorems (2)
	7. Quiz 2: Angle Theorems
	8. Construction: Copying Figures
	9. Construction: Bisecting Figures
	10. Basic Properties of Parallels
	11. Transversals and Special Angles
	12. More Proofs: Transversals and Special Angles
	13. Continued Proofs: Transversals and Special Angles
	14. More Proofs for Postulates 9 and 10
	15. Quiz 3: Parallels and Transversals
	16. Construction: Perpendiculars
	17. Construction: Tangents to Circle
	18. Construction: Parallels
	19. Classifying Triangle by Sides and Angles
	20. Exterior/Remote Interior Angles of Triangle
	21. Proofs Involving Triangles
	22. Other Polygons
	23. Quiz 4: Triangles, Polygons, and Angle Properties
	24. Special Project*
	25. Test
	26. Alternate Test*
27. Reference	

(\*) Indicates alternate assignment