



**Switched-On™**  
**ONLINE**

# 2009-2010 Curriculum Catalog

Integrated Math I

## Welcome to AOP™!

We are excited that you are including AOP as part of your program of instruction, and we look forward to serving you and your students.

AOP comes complete with a full, multimedia-enriched curriculum for grades 3—12 in five core subjects and electives.

This course catalog covers the following course:

- Integrated Math I

Thanks for choosing us!

***Glynlyon Curriculum Development Team***

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- Technical Support
- Product Configuration and Update Management

You can contact Alpha Omega Technical Services for any support need using the following contact information:

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Toll Free: 1-800-735-4193

Monday – Friday 7:00 am to 7:00 pm (CT)

## Integrated Math I

### Unit 1

Assignment Title
1. Classifying and Comparing Numbers
2. Fractions
3. Signed Numbers
4. Exponents and Order of Operations
5. Quiz 1: The Language of Mathematics
6. Variables and Expressions
7. Evaluating Expressions
8. Commutative and Associative Properties
9. The Distributive Property
10. Simplifying Expressions
11. Quiz 2: Introduction to Algebra
12. Drawing Conclusions
13. Truth Values
14. Project: Determining Logical Equivalence
15. Converse, Inverse and Contrapositive
16. Quiz 3: Logical Thinking
17. Open Sentences
18. Addition Property of Equality
19. Multiplication Property of Equality
20. Equations with More than One Step
21. Variables on Both Sides
22. Quiz 4: Properties of Equality
23. Special Project
24. Review
25. Test
26. Alternate Test

### Unit 2

Assignment Title
1. Multiplying with Like Bases
2. A Product to a Power
3. Dividing with Like Bases
4. Scientific Notation
5. Quiz 1: Exponential Expressions
6. Adding and Subtracting Polynomials
7. Multiplying by a Monomial
8. Multiplying all Polynomials
9. F.O.I.L. and Special Cases
10. Dividing by a Monomial
11. Long Division
12. Quiz 2: Operations with Polynomials
13. Simplifying Radicals
14. Multiplying Radicals
15. Dividing Radicals
16. Adding and Subtracting Radicals
17. Quiz 3: Radical Expressions
18. Simplifying Rational Expressions
19. Multiplying and Dividing Rational Expressions
20. Adding and Subtracting Rational Expressions
21. Quiz 4: Rational Expressions
22. Special Project
23. Review
24. Test
25. Alternate Test

### Unit 3

Assignment Title
1. Angle Relationship Definitions
2. Parallel Lines and Transversals
3. Interior and Exterior Angles of Polygons
4. Quiz 1: Angle Relationships
5. Triangle Properties
6. Pythagorean Theorem
7. Congruence
8. Parallelograms
9. The Trapezoid
10. Quiz 2: Polygons
11. Definitions and Nets
12. Surface Area
13. Volume
14. Quiz 3: Polyhedra
15. Central Angle and Arc Measure
16. Area and Sectors
17. The Cylinder and Sphere
18. Quiz 4: Circles and Spheres
19. Special Project
20. Review
21. Test
22. Alternate Test

## Integrated Math I (cont.)

### Unit 4

Assignment Title
1. The Coordinate Plane
2. Identifying Functions
3. Function Notation
4. Modeling Functions
5. Quiz 1: Introduction to Functions
6. The Distance Formula
7. The Midpoint Formula
8. The Circle
9. Quiz 2: Geometry Proof
10. Symmetry and Reflections
11. Translations and Dilations
12. Rotations
13. Quiz 3: Transformations
14. Parent Functions
15. Reflecting a Parent Function
16. Shifting a Parent Function
17. Quiz 4: Families of Functions
18. Special Project
19. Review
20. Test
21. Alternate Test

### Unit 5

Assignment Title
1. Semester Review
2. Semester Exam
3. Alternate Semester Exam

### Unit 6

Assignment Title
1. Writing Equations from Word Problems
2. Combining Like Terms
3. The Distributive Property
4. Literal Equations
5. Quiz 1: Multi-Step Equations
6. Two Unknowns
7. More than Two Unknowns
8. Using a Chart
9. Percent Problems
10. Mixture and Interest Problems
11. Quiz 2: Modeling with Linear Equations
12. Writing a Function Rule
13. Arithmetic Sequences
14. Direct Variation
15. Slope
16. Quiz 3: Linear Functions
17. Linear Equations
18. Slope-Intercept Form
19. Writing Linear Equations (1)
20. Writing Linear Equations (2)
21. Writing Linear Equations (3)
22. Quiz 4: Writing Linear Function Rules
23. Special Project
24. Review
25. Test
26. Alternate Test

### Unit 7

Assignment Title
1. The Greatest Common Factor
2. Factoring Out the GCF
3. Factoring Trinomials
4. Special Cases
5. Factoring by Grouping
6. Perfect Cubes
7. Quiz 1: Factoring
8. Recognizing a Quadratic
9. The Zero Product Property
10. The Square Root Method
11. Quiz 2: Quadratic Equations
12. Proportions
13. Using the LCD
14. Rate and Mixture Problems
15. Ratio Problems
16. Quiz 3: Rational Equations
17. Graphing One-Variable Inequalities
18. Addition Property of Inequality
19. Multiplication Property of Inequality
20. Multi-Step Inequalities
21. Maximum and Minimum
22. Quiz 4: Inequalities
23. Special Project
24. Review
25. Test
26. Alternate Test

## Integrated Math I (cont.)

### Unit 8

Assignment Title
1. Compound Inequality Graphs
2. Solving Compound Inequalities
3. Inequalities in Two Variables
4. Quiz 1: Compound and Two Variable Inequalities
5. Solution of a System
6. Graphing Systems of Equations
7. Systems of Inequalities
8. Quiz 2: Solving Linear Systems by Graphing
9. The Substitution Method
10. The Elimination Method
11. Matrices
12. Fractional Coefficients
13. Quiz 3: Solving Linear Systems Algebraically
14. Using Two Variables
15. Money and Unit Pricing
16. Using Formulas
17. Quiz 4: Modeling with Linear Systems
18. Special Project
19. Review
20. Test
21. Alternate Test

### Unit 9

Assignment Title
1. Measures of Central Tendency
2. Dispersion
3. Project: Graphing Data
4. Interpreting Data
5. Project: Data Analysis
6. Quiz 1: Statistical Analysis
7. Outcomes
8. Permutations
9. Combinations
10. Quiz 2: Outcomes
11. Probability
12. Project: Experimental Versus Theoretical Probability
13. Compound Events
14. Project: Probability
15. Quiz 3: Probability
16. Special Project
17. Review
18. Test
19. Alternate Test

### Unit 10

Assignment Title
1. Semester Review
2. Semester Exam
3. Alternate Semester Exam