

Elk Grove Charter School

Math I*

Course Requirements and Syllabus

10 Credits

Text

Integrated Mathematics I, Houghton Mifflin Harcourt

Course Description

This course is the first course in a series of three that uses an integrated approach to cover the following domains: Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. The problem situations, models, and technology used will foster connections to the eight standards of mathematical practice, which develop concepts from multiple perspectives. Mathematics I topics focus on the interconnectedness of function elements, tables, graphs, and equations; comparison and contrast and decision-making using Algebraic models; proving Geometric theorems about two-dimensional figures; and modeling using mathematical probability. Technology will be used to introduce and expand upon all areas of focus.

Course Note*

Math I satisfies the Algebra I graduation requirement. For students who are taking fewer than 10 credits, complete Unit 1 – Unit 6 first (regardless of the previous credits completed).

Mathematical Practice Standards

Standard 1 Make sense of problems & persevere in solving them.
Standard 2 Reason abstractly & quantitatively.

Standard 3 Construct viable arguments & critique others' reasoning.
Standard 4 Model with mathematics.
Standard 5 Use tools strategically.

Standard 6 Attend to precision.
Standard 7 Make use of structure.
Standard 8 Express regularity in reasoning.

Unit Overview

Unit	Module	Lesson	Interventions	Assessment
Each "unit" is 1 or 2 credits (15 to 30 hours of work).	Each unit is divided into several "modules," which are collections of lessons about the same topic.	Each "Lesson" is divided into 4 sections: <ul style="list-style-type: none"> • Explore • Explain • Elaborate • Evaluate* You must complete EACH section of EACH lesson indicated to complete your homework. *For EVALUATE, only odd-numbered problems are required.	Reteach worksheets and reviews are available as interventions for students who are unable to pass the test. See your ISP teacher for the supplemental worksheets.	Every unit has a test. 1 Performance Task is assigned as the midterm, and 1 is assigned as the final. These are SBAC-aligned.

Assignment Rubric:

	5	4	3	2	1
Completeness	90-100% of ALL assignments completed	At least 80% of ALL assignments completed	At least 60% of ALL assignments completed	At least 40% of ALL assignments completed	At least 20% of ALL assignments completed
Accuracy	90-100% of ALL assignments correct	At least 80% of ALL assignments correct	At least 60% of ALL assignments correct	At least 40% of ALL assignments correct	At least 20% of ALL assignments correct

Assignments

Unit	Credits	Book Assignment	Assessment
1 Quantities & Modeling	1	MODULE 1 QUANTITATIVE REASONING ·1.1 MODULE 2 ALGEBRAIC MODELS ·2.1 ·2.3 ·2.5 ·2.2 ·2.4	Unit 1 Test Standards Quiz #1 (Number & Quantity)
2 Understanding Functions	1	MODULE 3 FUNCTIONS & MODELS ·3.1 ·3.2 ·3.4 MODULE 4 PATTERNS & SEQUENCES ·4.1 ·4.2	Unit 2 Test Standards Quiz #2 (Functions)
3 Linear Functions, Equations, & Inequalities	2	MODULE 5 LINEAR FUNCTIONS ·5.1 ·5.2 ·5.3 MODULE 6 FORMS OF LINEAR EQUATIONS ·6.1 ·6.3 ·6.5 ·6.2 ·6.4	Unit 3 Test
4 Statistical Models	1	MODULE 8 STATISTICAL MODELS ·8.1 ·8.2 MODULE 9 ONE-VARIABLE DATA DISTR. ·9.1 ·9.3 ·9.4 MODULE 10 LINEAR MODELING ·10.1 ·10.2	Unit 4 Test Standards Quiz #3 (Statistics & Probability)
5 Linear Systems	1	MODULE 11 SOLVING SYSTEMS OF LINEAR EQU. ·11.1 ·11.3 ·11.2 ·11.4 MODULE 12 MODELING WITH LINEAR SYSTEMS ·12.1 ·12.2 ·12.3	Unit 5 Test Standards Quiz #4 (Algebra)
Midterm (Cumulative)	--	--	Performance Task 1
6 Exponential Relationships	1	MODULE 14 GEOMETRIC SEQUENCES ·14.1 ·14.3 ·14.5 ·14.2 ·14.4 MODULE 15 EXP. EQUATIONS & MODELS ·15.1 ·15.4	Unit 6 Test
7 Transformations & Congruence	2	MODULE 16 TOOLS OF GEOMETRY ·16.1 ·16.2 ·16.4 MODULE 17 TRANSFORMATIONS & SYMMETRY ·17.1 ·17.2 ·17.3 MODULE 18 CONGRUENT FIGURES ·18.1	Unit 7 Test
8 Lines, Angles, & Triangles	1	MODULE 19 LINES & ANGLES ·19.5 MODULE 20 TRIANGLE CONGRUENCE CRITERIA ·20.1 ·20.3 ·20.2 ·20.4 MODULE 21 APPLICATIONS OF TRIANGLES ·21.1 MODULE 25 COORDINATE PROOF ·25.5	Unit 8 Test Standards Quiz #5 (Geometry)
Final (Cumulative)	--	--	Performance Task 2