



Course Title: Integrated Mathematics I, Advanced

Instructor: Trisha Coulter

Instructor Availability: Tuesdays and Thursday until 4:30pm

Instructor Contact: email: [tcoulter@gomperscharter.org](mailto:tcoulter@gomperscharter.org)

call/text: 734-770-4955

## Course Description:

Integrated Math I provides the foundation required for success in future mathematics courses through an integration of both content and learning procedures. Topics covered include algebraic expressions and equations, number sense, probability and statistics, and geometry, all with an emphasis on deepening understanding of linear relationships. Through the use of data collection, equations, and graphs, students will recognize and develop patterns and models. Students will learn to use problem solving skills in real-world applications due to emphasis on mathematical literacy. Students will think critically, collaborate successfully with classmates, and communicate mathematical concepts effectively. Assessments include performance tasks, benchmarks, individual and group projects or presentations of learning, and unit and final exams. Instruction combines both California Common Core State Standards and Mathematical Practice standards in a college preparatory environment.

## GPA Grading Guidelines:

Category	Grading Criteria	Percentage
Classwork/Participation	<ul style="list-style-type: none"><li>Completion/Quality</li></ul> <p>(Must have a minimum of 1 weekly grade)</p>	30%
Demonstrations of Learning	<ul style="list-style-type: none"><li>Key Course Assignments</li></ul> <p>(See course syllabus for Unit Key Assignments)</p>	35%
Homework/Independent Learning	<ul style="list-style-type: none"><li>Any work assigned to a student in which they complete on their own outside of class.</li></ul> <p>(Must have a minimum of 1 weekly grade)</p>	10%
Quarter Finals	<ul style="list-style-type: none"><li>Quarter finals are course specific, standards based exams that cover content from the 9 week quarter.</li></ul>	25%

\* Classwork/Participation and Homework/Independent Learning will be updated weekly.



## Prerequisites:

Successful completion of Common Core Math 6, Math 7 and Math 8.

## Course Materials:

GPA School Planner

Interactive Math Notebook (provided by teacher)

Binder with "Math" section

Pencil Pouch: two pencils, erasers, colored pen (not black), highlighter

Learning Upgrade/Khan Academy Journal (provided by teacher)

Digital Resources: Google Classroom, Learning Upgrade/Khan Academy

## Course Structure:

This course will be lecture based where students will be required to take complete notes.

Following lectures, students will be asked to complete an independent assignment such as a worksheet or computer based assignment. Students will have daily assignments as well as long term, independent computer work to complete. Students will be regularly assessed through syntheses of learning, quizzes, performance tasks, unit exams, and final exams.

## Course of Study:

Unit 1: Quantities

9 DAYS

Content Standards	Learning Objectives	Key Assignments/Exams
N-Q.1 N-Q.2 N-Q.3  N-Q: Number and Quantity	<i>The Real Number System</i> <input type="checkbox"/> Students will be able to extend the properties of exponents to rational numbers. Also, use the properties of rational and irrational numbers  <i>Quantities</i> <input type="checkbox"/> Students will be able to reason quantitatively and use units to solve problems	Unit 1 Assessment

Unit 2: Expressions

9 DAYS

Content Standards	Learning Objectives	Key Assignments/Exams
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A-SSE.1 (A,B)  A-SSE: Seeing Structure in Expressions	<ul style="list-style-type: none"><li><input type="checkbox"/> Students will be able to interpret the structure of expressions.</li><li><input type="checkbox"/> Students will be able to write expressions in order to solve problems.</li></ul>	Unit 2 Assessment
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## Unit 3: Creating Equations 10 DAYS

Content Standards	Learning Objectives	Key Assignments/Exams
A-CED.1 A-CED.2 A-CED.3 A-CED.4  A-CED: Creating Equations	<ul style="list-style-type: none"><li><input type="checkbox"/> Students will be able to create equations that describe numbers and relationships.</li></ul>	Unit 3 Assessment

## Unit 4: Equations and Inequalities 10 DAYS

Content Standards	Learning Objectives	Key Assignments/Exams
A-REI.1 A-REI.3 A-REI.5 A-REI.6 A-REI.10 A-REI.11 A-REI.12  A-REI: Reasoning with Equations and Inequalities	<ul style="list-style-type: none"><li><input type="checkbox"/> Students will be able to understand and solve equations as a process of reasoning and explain their reasoning.</li><li><input type="checkbox"/> Students will be able to solve systems of equations</li><li><input type="checkbox"/> Students will be able to represent and solve equations and inequalities graphically</li></ul>	"Fantasy Football"  Unit 4 Assessment

## Unit 5: Functions 24 DAYS

Content Standards	Learning Objectives	Key Assignments/Exams
F-IF.1 F-IF.2 F-IF.3 F-IF.4 F-IF.5	<ul style="list-style-type: none"><li><input type="checkbox"/> Students will be able to understand the concept of a function and use function notation.</li></ul>	Unit 5 Assessment



F-IF.6 F-IF.7 (A,E) F-IF.9  F-IF: Interpreting Functions	<input type="checkbox"/> Students will be able to analyze functions using different representations.	
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## Unit 6: Building Functions 13 DAYS

Content Standards	Learning Objectives	Key Assignments/Exams
F-BF.1 (A,B) F-BF.2 F-BF.3  F-BF: Building Functions	<input type="checkbox"/> Students will be able to build a function model that represents the relationship between two quantities <input type="checkbox"/> Students will be able to build new functions from existing functions	"Function Machine"  Unit 6 Assessment

## Unit 7: Linear, Quadratic and Exponential Models 22 DAYS

Content Standards	Learning Objectives	Key Assignments/Exams
L-E.1 (A,B,C) L-E.2 L-E.3 L-E.5  L-E: Linear, Quadratic and Exponential Models	<input type="checkbox"/> Students will be able to construct and compare linear, quadratic and exponential models and solve problems	"Discovering Slope"  "Skittles Lab"  Unit 7 Assessment

## Unit 8: Congruence 24 DAYS

Content Standards	Learning Objectives	Key Assignments/Exams
G-CO.1 G-CO.2 G-CO.3 G-CO.4 G-CO.5 G-CO.6 G-CO.7 G-CO.8 G-CO.12	<input type="checkbox"/> Students will be able to experiment with transformations in the plane. <input type="checkbox"/> Students will understand congruence in terms of rigid motions. <input type="checkbox"/> Students will prove geometric theorems.	"Instagram Project"  Unit 8 Assessment



G-CO.13  G-CO: Geometric Congruence	<input type="checkbox"/> Students will make geometric constructions.	
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## Unit 9: Expressing Geometric Properties with Equations

20 DAYS

Content Standards	Learning Objectives	Key Assignments/Exams
G-GPE.4 G-GPE.5 G-GPE.7  G-GPE: Expressing Geometric Properties with Equations	<input type="checkbox"/> Students will be able to use coordinates to prove simple geometric theorems algebraically	"Geometric Proofs"  Unit 9 Assessment

## Unit 10: Statistics

25 DAYS

Content Standards	Learning Objectives	Key Assignments/Exams
S-ID.1 S-ID.2 S-ID.3 S-ID.5 S-ID.6 (A,B,C) S-ID.7 S-ID.8 S-ID.9  S-ID: Interpreting Categorical and Quantitative Data	<input type="checkbox"/> Students will be able to summarize, represent and interpret data on a single count or measurement variable  <input type="checkbox"/> Students will be able to summarize, represent and interpret data on two categorical and quantitative variables  <input type="checkbox"/> Students will be able to interpret linear models	"Map Data Project"  Unit 10 Assessment

### Course Specific Student Expectations:

Students will demonstrate REACH values at all times.

Students will follow the rules in accordance with Gompers Preparatory Academy handbook.

Students will come to class prepared every day with all course materials.

Students will write their assignments down in their planners, daily. It is expected that parents/guardians check student planners on a regular basis to support students.

Students will remain in their seats unless given permission by adult in the room.

Students will complete their work in a timely and legible manner.

Students will attend Mandatory Academic Counseling at lunch and/or after school if assignments are late or incomplete. Late assignments will lose 50% credit. Assignments turned in early, and complete, will earn 10% extra credit.



Students will read at least 30 minutes a day, outside of the classroom.

Students will effectively use their resources (teachers, peers, textbooks, and internet sources).

Students will be responsible for finding out and making up all work missed by being absent by checking with classroom leaders and the "absent bin". Students will have the number of days they were absent to make up work for full credit.

Students will have one week, from date assessment was given, to make-up Unit Assessments, if absent.

Students will receive a late grade if absent on Key Assignment due dates: projects, presentations, etc.

### Accommodations/Modification and Supports:

Any student who requires accommodations, modifications or additional supports should contact me as early as possible so that we may arrange accommodations, modifications and supports.

### GPA Student Expectations

School-wide Attendance: All students are expected to be punctual and in their classroom seat, ready to learn for each day. Under California law (Ed. Code 48200) all children between the ages of six and eighteen are required to be enrolled and in regular attendance at school. GPA families know that school attendance is the critical first step to make sure that each student receives an education that will help them on their path to college. Students cannot learn what they need to be prepared for the next grade level if they are not in school. The more absences from school a student has, the more they fall behind in their classes and the more difficult it will be to make it to college.

Planner Use: All students are expected to write all assignments in their GPA planner daily. Your first GPA planner will be provided by the school to support organization and time management.

Homework Completion: As a school working toward college preparation, all GPA students are expected to complete their daily/weekly assignments. Students who fail to complete their homework assignments on time, and are unexcused, will be required to attend lunch and after school tutoring support daily until completed. Until all assignments are completed, students may not be eligible for athletics, clubs, and other extracurricular activities.

Electronic Device Policy: Cell phones, smart watches, and other electronic communication devices that can send and/or receive data are not permitted to be visible, heard, or used in any manner during school hours except by approval of school authorities. Any violation and/or disruption of the learning process will result in the confiscation of the item. The parent/guardian must pick up the confiscated item from the Office of Student Conduct or the teacher.



Computer/Internet Usage Policy: Students may not use computers and/or the GPA network without proper adult supervision. The teacher/staff will choose resources on the Internet that are appropriate for classroom instruction and/or research for the needs, maturity, and ability of their students.

### *Acceptable Use-*

- Access to any site that provides information relevant to current class assignments
- Access to college or university websites
- Use of teacher approved educational software (games, instructional tools, etc.)

Academic Integrity: Honest behavior is an expectation for all students at Gompers Preparatory Academy. Our goal is to create and maintain an ethical academic atmosphere. Acts of academic dishonesty that will not be tolerated at GPA are listed below:

- Cheating on any classroom assignment, test, or quiz
- Plagiarism - copying or representing another's ideas, words, or work as one's own, without properly citing the source. Plagiarism includes the misuse of published material, electronic material, and/or the work of other students. The original writer who intentionally shares his/her work for another to copy, without the permission of the teacher, is also engaged in plagiarism.
- Fabrication (any falsification or invention of date, citation, or other authority in an assignment); theft or alteration of materials
- Unauthorized collaboration
- Unauthorized use of electronic devices

Students found in violation of GPA's Academic Integrity Policy will be disciplined appropriately which may lead to formal suspension. Consequences for offenses may include, but are not limited to, detention, *lowering of academic and citizenship grade and/or suspensions/exclusion from extracurricular activities.*

### Standards/Format for Writing Papers - MLA Format:

The standard format for all papers follows the MLA formatting rules:

1. Typed, double-spaced: TIMES NEW ROMAN, 12 font, including title
2. Heading: 4 lines - UPPER LEFT corner
  - Student name: "Sammy Gompers"
  - Teacher name: Ms. Teacher
  - Course name, period: English I, Period 3
  - Date: 06 February 2009
3. All pages numbered: upper right corner, last name and page number; no punctuation, no "p." or "pg."
4. Title: centered, upper and lower case





5. Work Cited/ Documentation Format: It is necessary to credit any source that is used in a paper or project. Plagiarism is considered cheating. All sources must be documented. Citing sources in a paper must be thorough and accurate. MLA formatting for in text citations and works cited is mandatory

## Important Dates:

### Quarter 1:

- Math Placement Test: August 29th -30th
- Q1 Performance Task: September 27th
- Q1 Final Exam: October 26th - 27th
- Parent Conferences: October 23rd - 27th
- End Date: October 30th

### Quarter 2:

- Q2 Performance Task: December 5th
- Q2 Final Exam: January 25th
- Parent Conferences: January 16th - 22nd
- End Date: January 31st

### Quarter 3:

- Q3 Performance Task: March 13th
- Q3 Finals Week: April 12th
- Parent Conferences: April 16th - 20th
- End Date: April 23rd

### Quarter 4:

- Q4 Performance Task: May 16th
- Q4 Finals Week: May 31st
- End Date: June 26th

Student Signature : \_\_\_\_\_ Parent/Guardian Signature: \_\_\_\_\_

Date: \_\_\_\_\_





