

GEOMETRY (Regents)-Illustrative Math

Mrs. Durnion

This course is for students who passed the Algebra I Regents course. Geometry Regents culminates in the NYS Geometry Regents Exam. Students will use reasoning and sense-making to develop geometric thinking that can be used to solve problems both in real life and mathematical context. Students build on experiences from middle school to begin to formalize geometric ideas, in particular angle relationships and shapes which will be used to justify geometric relationships.

For the first several units, students practice generating conjectures and observations. This begins with work on compass and straightedge constructions. They gradually build up to formal proof, engaging in a cycle of conjecture, rough draft, peer feedback, and final draft narratives. To support their proof writing, students record definitions and theorems in a reference chart, which will be used and expanded throughout the course.

Students build on their middle school study of transformations of figures. Students use transformation-based definitions of congruence and similarity, allowing them to rigorously prove the triangle congruence and similarity theorems. They apply these theorems to prove results about quadrilaterals, isosceles triangles, and other figures. Students extend their understanding of similarity when they study right triangle trigonometry, which in future courses will be expanded into a study of periodic functions. Next, students derive volume formulas and study the effect of dilation on both area and volume. They connect ideas from algebra and geometry through coordinate geometry, reviewing theorems and skills from prior units using the structure of the coordinate plane. They use transformations and the Pythagorean Theorem to build equations of circles, parabolas, parallel lines, and perpendicular lines from definitions, and they link transformations to the concept of functions.

Students analyze relationships between segments and angles in circles and develop the concept of radian measure for angles, which will be built upon in subsequent courses. They close the year by completing the NYS Regents Readiness to prepare for the Regents exam on June 10, 2024.

Within the classroom activities, students have opportunities to engage in aspects of mathematical modeling. Additionally, modeling prompts are provided for use throughout the course. Modeling prompts offer opportunities for students to engage in the full modeling cycle. These can be implemented in a variety of ways. Please see the course guide for a more detailed explanation of modeling prompts. Read more about how, when, and why to use the mathematical modeling prompts in the [Curriculum Guide](#).

EXPECTATIONS	SCORING POLICY (2 Marking Periods: 10 weeks each)
1.) Be on Time.	
2.) Come Prepared. (Illustrative Math Book-Kepts in Class)	Classwork (Practice Problems) 30%
3.) Be Respectful of the Learning Environment – NO PHONES	Closing (Cool Down) 20%
4.) Ask Questions – Seek Help (Google Classroom)	Regents Exam Questions (Weekly) 20%
5.) Challenge Yourself Everyday - THINK (Be Consistent)	Unit Assessments 30%

PRACTICE PROBLEMS (30%): Classwork includes all work completed during class time.

- Corrections can be made on Homework/Classwork. You must turn in your work on time. (Please refer to the corrections policy) If you are absent, use all resources to catch up the next day. Do not wait. Once a Unit Test has been assigned I will no longer accept late homework/classwork for that Unit after the Friday that follows. You must keep up with your assignments. You can keep your notes/homework and weekly review in the binder. You have the option of taking the binder home or leaving it in the classroom.

ASSESSMENTS (30%): In order to check for understand of concepts presented in the Geometry Common Core/Regents class, students will complete both quizzes (approx. 20-30 minutes) and unit tests (approx. 60 minutes). Both quizzes and unit tests will be reflective of common core/regents exam questions given on past examinations. All quizzes & unit test will be scored using corresponding rubric scoring guides. Like future exams, students are only allowed to take quizzes and unit tests once. There will be no test or quiz make-ups or retakes. It is the responsibility for students to be prepared for all tests and quizzes.

I always drop the lowest test grade. If you miss a test, that one is dropped. If you miss more than one, you are absent too often.

COOL DOWN (20%): At the end of each class, every student is responsible for completing the closing question. Please write your response on the blue index card provided. You will receive a score each day and you will be given a weekly tally of total points earned. If you are absent, you are still responsible for the lesson closing; the closing is included in your note packet.

WEEKLY REGENTS REVIEW (20%): Every Friday students will be introduced to a weekly thinking task. Each task is due the following Wednesday and requires students to express their mathematical thinking and expression in a clear and concise manner. Each think task is graded out of 5 points. You are graded on your in-depth thinking skills and how you explain your thinking.

NOTES/VOCAB.: Students will take notes and be introduced to new vocabulary and concepts on a daily basis. It is the student's responsibility to keep their note packets organized. There are 9 units in the Geometry Regents class. Note packets can be used during Unit Tests. All notes will be posted daily on Google Classroom.

ABSENT FROM CLASS: Check Google Classroom! (It is updated with lessons, notes and information every day.)

CALCULATORS: I have a class set of graphing calculators in my room.

GRADE REPORTS: Every two weeks (Friday), each of my students will receive a grade report stating the work that has been completed and graded. You can also check Power school daily for grades and attendance.

SYLLABUS

We are preparing for the Regents exam in July. It is scheduled for Wednesday January 22th (am). In order to receive your Advanced Regents diploma and meet the minimum enrollment requirements for MCC it is highly recommended that you pass the class and regents exam.

SEMESTER

Marking Period #1

Unit 1: Constructions and Rigid Transformations (15)

Unit 2: Congruence (13)

Unit 3: Similarity (11)

Unit 4: Right Triangle Trigonometry (9)

Marking Period #2

Unit 5: Solid Geometry (14)

Unit 6: Coordinate Geometry (13)

Unit 7: Circles (10)

Regents Exam Review/Prep (Past Exams)

Being that this is a semester course, you should expect a new lesson every day. It is imperative that you begin each class by completing the warm-up, taking organized, neat and complete notes and keep up with the daily practice problem assignments. Geometry Regents is a challenging course. However, if you work consistently (every day) you will be successful.

DAILY SCHEDULE

Our daily routine will be the same. Class time will be used as follows:

Opening Activity	5 minutes	No Passes First 10 minutes
Notes/Examples	20-30 minutes	No Passes during the Lesson
Cool Down GRADED	10 minutes	Separate Sheet
Practice Problems GRADED	20-30 minutes	Separate Assignment Sheet No Passes Last 10 minutes

Corrections Policy: All of my students are allowed to make corrections on any practice problem assignment, cool down and regents review. In order to qualify for corrections, the assignment must be completed and turn in on time. You cannot make corrections on late work. Please only correct the work that you missed; do no copy work that is correct on your correction sheet, it is a waste of time. Your separate sheet must be staple to the front of the original assignment that your are correcting. Corrections will not be accepted without the original assignment. You have the entire marking period to complete corrections for any past assignment. You are allowed to make corrections one time.

If you have any questions or concerns, please contact me using the following email, send a private comment on google classroom or call the following number. I will respond as soon as possible.

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