

Geometry

Teacher: Ms. Kastrati/Mr. Knights (Period 1,2,6,7)

Email: gkastrati@schools.nyc.gov

kknights3@schools.nyc.gov



Dear Students and Parent/Guardians:

Welcome to Geometry! We are looking forward to teaching you as we spend time exploring polygons, circles, congruence, similarity, and transformation. Please find below all the information you need in order to be successful in Geometry this year.

Year Essential Question: *How do we use geometry to enrich our lives and environment?*

Marking Period Breakdown

1-st Semester:

1-st Marking period; 9/4---10/17/2025

10/20----11/26

12/1/2025-1/16/2026

2-nd Semester

1/27--3/6/2026

3/9--4/24/2026

4/27-

| | | |
|--|--|---|
| S E M E S T E R #1 | Sept 4 th – Oct 17 th | Unit #1: Constructions and Rigid Transformations 22-32 days <i>Why is precision important in mathematics?</i> A: 1. Create a construction from instructions 2. Describe construction steps precisely. 3. Use circles in a construction to reason about lengths in a figure. B: Comprehend that rigid transformations produce congruent figures by preserving distance and angles. • Draw the result of a transformation of a given figure. |
| | Oct 20 th - Nov 14 th | Unit #2: Congruence 11-19 days Students: • Comprehend and generate congruence statements that establish corresponding parts. • Justify whether or not figures are congruent by reasoning about rigid transformations. |
| | Nov 16 th – Dec 10 th | Unit #3: Similarity 14-22 days <i>In this section students:</i> • Comprehend that dilations take angles to congruent angles and lines not passing through the center of the dilation to parallel lines. • Create and interpret scaled drawings of figures. |
| S E M E R E | Dec 11 th – Jan 23-d | Unit #4: Right Triangle Trigonometry 12-17 days <i>In this section students:</i> |

| | | |
|---|---|--|
| S T E R #2 | | <ul style="list-style-type: none"> • Comprehend that one acute angle of a right triangle determines all the ratios of the side lengths in that triangle. • Justify an estimated side length or angle measure using a table of ratios of side lengths of right triangles. |
| | **Note semester 2 begins January 27-th 2025** | |
| | Jan 27 th – February 27 th | Unit #5: Solid Geometry 19-22 days <i>In this section students:</i> <ul style="list-style-type: none"> • Describe the relationships between scale factors and areas, using square root graphs and calculations. • Generate multiple cross-sections of three-dimensional figures. • Identify the three-dimensional solid created by rotating a two-dimensional figure, using a linear axis. |
| March 2 nd – March 27 nd | Unit#6 Coordinate Geometry 15-22 days <i>In this section students:</i> <ul style="list-style-type: none"> • Compare and contrast rigid transformations, similarity transformations, and those that are neither. • Describe transformations as functions that take points in the plane as inputs and give other points as outputs. • Begin by using similar triangles to connect the coordinate rule $(x,y) \rightarrow (3x, 3y)$ to the geometric definition of a dilation. | |
| March 30-th –April 24-th | Unit #7 Circles 11–18 days <i>A:In this section students:</i> <ul style="list-style-type: none"> • Determine measures of central angles, inscribed angles, and arcs. • Use the relationship between radii, chords, and tangent lines to prove geometric theorems. • Are introduced to new types of angles and mathematical objects defined by circles <i>B:In this section students:</i> <ul style="list-style-type: none"> • Construct the inscribed and circumscribed circles of a triangle. • Prove properties of the angles in a quadrilateral inscribed in a circle. <i>C:In this section students:</i> <ul style="list-style-type: none"> • Learn the relationships between measures of some different parts of circles. • Comprehend that the radian measure of an angle whose vertex is the center of a circle is the ratio of the length of the arc defined by the angle to the circle’s radius. • Coordinate between representations of angles measured in degrees and in radians. Generalize methods for calculating lengths of arcs and areas of sectors in circles. | |

| | | |
|--|---|--|
| | | <i>D:Students have the opportunity to apply their thinking from throughout the unit.</i> |
| | May 16 th - June 26 th | Unit 8 Regents Review <i>Geometry regents will be on June, 2025**</i> |

Materials Needed (All required materials are due by: **Monday September ?????2022**):

- Pencils, Pencils, Pencils ☺
- Colored pens or pencils
- 2” Binder with dividers
- Geometry tool kit (optional)

Classroom Expectations:

All students have the right to learn in an environment which will provide them with the best chance of success in this class. ***No student has the right to interfere with the learning of any other student.*** The following are classroom expectations for you to be successful in geometry.

1. Be on time, on task & prepared to learn EVERYDAY.
2. Respect the teacher, the classroom, other students and yourself.
3. Be responsible for your own learning.
4. Clean up after yourself and your peers.
5. Keep all personal electronics PUT AWAY.

| | | |
|--|--|--|
| <p>Entering the Room –</p> <ol style="list-style-type: none"> 1. Come in quietly on time. 2. Pick up all supplies you will need for the day 3. Sit in assigned seat 4. Take out homework 5. Begin working on Warm Up | <p>During Class –</p> <ol style="list-style-type: none"> 6. Treat classmates and teachers with dignity and respect 7. Listen while others are speaking. 8. Raise hand 9. Stay on task 10. Participate in discussions 11. Use language that is respectful of classmates’ and teachers’ gender, race , national origin, language and sexual orientation 12. Adhere to the ethical use of technology in regards to property, privacy and appropriateness. 13. Care for the pro | <p>End of Class -</p> <ol style="list-style-type: none"> 14. Put all supplies away 15. Submit Exit Slip and/or classwork. 16. Wait to be dismissed |
|--|--|--|

Absences:

If you are absent from class, it is **your responsibility** to get any assignments you missed and the notes. These will be available in a container labeled “Ms. Kastrati Geometry Work.” You **MUST** turn these in within **5 days** after returning to school.

Grading Policy -We are grading in three domains. Academic Mastery, Academic Work Habits, and Contribution to community.

Academic Mastery

The following is how your grade will be calculated each marking period:

- **60% Test, Quizzes, and Projects**
 - **TEST CORRECTIONS:** Test corrections are allowed to be completed up to one week after the test is given back. You can receive 1/2 the points back for each question.
 - **RETAKE POLICY:** You are allowed to retake **tests and quizzes**. HOWEVER, you **MUST** conference with Ms. Kastrati and Mr. Knights before retaking the test **AND** complete test corrections. Once you receive the test back, you have one week to retake it.
- **20% Classwork**
 - This includes exit slips, binder checks and any other assignments that are collected and graded.
- **10% Homework**
 - Work will be assigned that you should complete outside of class. You are expected to complete ALL assignments. They are crucial in order to be successful in Geometry.
 - *Think about when you play a sport or an instrument, you get better by practicing. In Geometry, completing assignments is of utmost importance; if you want to be successful in this class, you have to practice! STUDENTS WHO STUDY AND GO OVER THEIR WORK, END UP WITH A HIGHER GRADE IN THIS CLASS.*
- **10 % Engagement**
 - You will receive 25 points a week (5 points each day).
 - Your participation points are based on how well you follow the classroom expectations each day. *Failure to maintain classroom expectations means a loss of participation points.*
 - +1 On time + prepared for class (In seat when bell rings with homework/pencil out)
 - +1 Do Now
 - +1 Participation (Raise your hand, answer/ask a question, on task, collect/pass out materials)

The following is how you will be graded at the end of each semester (Fall 3 and Spring 3):

| Semester 1 | Semester 2 |
|------------------------|------------------------|
| ● 30% Fall 1 | ● 30% Spring 1 |
| ● 30% Fall 2 | ● 30% Spring 2 |
| ● 30% Fall 3 | ● 30% Spring 3 |
| ● 10% Semester 1 Final | ● 10% Semester 2 Final |

Extra Help:

You are encouraged to come for extra help when necessary. I am available at the following times:

- During lunch time (with permission for your teacher)
- Before period 1 in room 416
- By appointment

We look forward to working with you this coming year and wish you a successful year. Please review the syllabus with a parent or guardian and return just this page to me by **Monday, September 15** for your first homework grade!

- Ms. Kastrati & Mr. Knights

Student's name (print): _____

Student's signature: _____

Geometry period: _____

Parent/Guardian name: _____

Email: _____

Cell: _____

Parent/Guardian signature: _____

Notes to teacher: