

Geometry - May & June 2025

Office Hours: A Lunch on Monday / Tuesday / Thursday in Room 500 or 501

Monday	Tuesday	Wednesday	Thursday	Friday
28 April 6.3 & 6.4	29 6.5 & 6.6	30 Topic 6 Review	1 Topic 6 Quiz	2 7.1 Notes
5 7.2 Notes	6 7.3 Notes	7 7.1 - 7.3 Review	8 END MP5 7.1 - 7.3 Quiz	9 MP6 7.4 Notes
12 ½ Day 7.5 Notes	13 7.4 - 7.5 Review	14 7.4 - 7.5 Quiz	15 10.1 Notes	16 9.3 Notes
19 10.2 Notes	20 10.1/10.2/9.3 Review	21 10.1/10.2/9.3 Quiz	22 Practice	23 ½ Day 10.3 Notes
26 NO SCHOOL	27 10.4 Notes	28 10.5 Notes	29 10.3 - 10.5 Practice	30 Field Day
2 JUNE 10.3 - 10.5 Review	3 10.3 - 10.5 Quiz	4 11.1 Notes	5 11.1 Practice	6 11.2 Notes
9 11.3 & 11.4 Notes	10 Topic 11 Review	11 Topic 11 Quiz	12 5.1 & 5.2 Notes	13 5.3 Notes
16 ½ Day Final Reviews Period 1: 710-939 Period 2: 946-1149	17 ½ Day Final Reviews Period 3: 710-939 Period 4: 946-1149	18 ½ Day Final Exams Period 1: 710-939 Period 2: 946-1149	19 ½ Day Final Exams Period 3: 710-939 Period 4: 946-1149	20 NO SCHOOL
23 LAST DAY!				

Objectives

Topic 5

- Prove the Perpendicular Bisector Theorem, the Angle Bisector Theorem, and their converses.
- Use the Perpendicular Bisector Theorem to solve problems.
- Use the Angle Bisector Theorem to solve problems.
- Prove that the point of concurrency of the perpendicular bisectors of a triangle, called the circumcenter, is equidistant from the vertices.
- Prove that the point of concurrency of the angle bisectors of a triangle, called the incenter, is equidistant from the sides.
- Identify special segments in triangles and understand theorems about them.
- Find and use the point of concurrency of the medians of a triangle to solve problems and prove relationships in triangles.
- Find the point of concurrency of the altitudes of a triangle.

Topic 7

- Dilate figures on and off the coordinate plane
- Understand that two figures are similar if there is a similarity transformation that maps one figure to the other
- Use dilations and rigid motions to prove triangles are similar
- Prove and use AA Similarity, SSS Sim, SAS Similarity
- Use similarity of right triangles to solve problems
- Use Side-Splitter Theorem and the Triangle Midsegment Theorem to find lengths of sides and segments of triangles

Topic 10

- Calculate the length of an arc when the central angle is given in degrees or radians.
- Calculate the area of sectors and segments of circles.
- Identify lines that are tangent to a circle using angle measures and segment lengths.
- Solve problems involving tangent lines.
- Prove and apply relationships among chords, arcs, and central angles.
- Find lengths of chords given the distance from the center of the circle, and use this information to solve problems.
- Identify and apply relationships among the measures of inscribed angles, arcs, and central angles
- Identify and apply the relationships between an angle formed by a chord and a tangent to its intercepted arc.
- Recognize and apply angle relationships formed by secants and tangents intersecting inside and outside a circle.
- Recognize and apply segment length relationships formed by secants and tangents intersecting inside and outside a circle.

Topic 11

- Use Euler's Formula to calculate the number of vertices, faces, and edges in polyhedrons.
- Describe cross sections of polyhedrons.

- Describe rotations of polygons about an axis.
- Understand how the volume formulas for prisms and cylinders apply to oblique prisms and cylinders.
- Model three-dimensional figures as cylinders and prisms to solve problems.
- Understand how the volume formulas for pyramids and cones apply to oblique pyramids and cones.\
- Model three-dimensional figures as pyramids and cones to solve problems
- Use Cavalieri's Principle to show how the volume of a hemisphere is related to the volume of a cone and a cylinder.
- Calculate volumes and surface areas of spheres and composite figures.

Standards

HSG.CO.C.9, HSG.CO.C.10, HSG.CO.C.11, HSG.CO.D.12, HSG.C.A.3, HSG.SRT.B.5, MP 1-7