

Information for Course Syllabus

Name of Course: Geometry B

Grade Level: 11-12

School: ORHS

Major Assignments: Interactive Notebook;
Learning Target Assessments

Field Trips: None

How can parents access instructional materials? Canvas

Geometry B

2021-2022

Term 1

Similarity	G.SRT.A.1 Verify informally the properties of dilations given by a center and a scale factor.
	G.SRT.A.2 Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.
	G.SRT.A.3 Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.
	G.SRT.B.4 Prove theorems about similar triangles.
	G.SRT.B.5 Use congruence and similarity criteria for triangles to solve problems and to justify relationships in geometric figures.

Trigonometry	G.SRT.C.6 Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.
	G.SRT.C.7 Explain and use the relationship between the sine and cosine of complementary angles.
	G.SRT.C.8 Solve triangles. a. Know and use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. b. Know and use the Law of Sines and Law of Cosines to solve problems in real life situations. Recognize when it is appropriate to use each.

Solid Geometry (Volume and Surface Area)	G.GMD.A.1 Give an informal argument for the formulas for the circumference of a circle and the volume and surface area of a cylinder, cone, prism, and pyramid.
	G.GMD.A.2 Know and use volume and surface area formulas for cylinders, cones, prisms, pyramids, and spheres to solve problems.
	G.MG.A.1 Use geometric shapes, their measures, and their properties to describe objects.
	G.MG.A.2 Apply geometric methods to solve real world problems.

Geometry B

2021-2022

Term 2

Coordinate Geometry	G.GPE.B.2 Use coordinates to prove simple geometric theorems algebraically.
	G.GPE.B.3 Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems.
	G.GPE.B.4 Find the point on a directed line segment between two given points that partitions the segment in a given ratio.
	G.GPE.B.5 Know and use coordinates to compute perimeters of polygons and areas of triangles and rectangles.

Circles	G.C.A.1 Recognize that all circles are similar.
	G.C.A.2 Identify and describe relationships among inscribed angles, radii, and chords.
	G.C.A.3 Construct the incenter and circumcenter of a triangle and use their properties to solve problems in context.
	G.GPE.A.1 Know and write the equation of a circle of given center and radius using the Pythagorean Theorem.

Conditional Probability	G.C.B.4 Know the formula and find the area of a sector of a circle in a real-world context.
------------------------------------	--

End Of Course Review