

General

Geometry, Part 2



How to Take This Course

Complete all the quizzes and the assignment in each unit. Once the quizzes for a unit are complete, you will have access to the unit test. You will have access to the final exam when all of the unit tests are complete, and the assignments are completed and graded.

Please allow for 2-3 days per assignment for grading. Read the full course instructions so you understand how this course works.

- How This Course Works
- Instructions for the Course
- Ask The Teacher

Meet your teacher for this course and ask a question.

Unit 1. Right Triangles and Trigonometry

In this unit we will learn to use the Pythagorean theorem to solve for missing sides in right triangles. To identify and solve special right triangles. When and how to use the six trigonometric functions: Sin, Cos, Tan, Sec, CSC, and Cot. Plus, solve problems involving angles of elevation and depression.

- 1.1 Pythagorean Theorem
 - 1.1 Quiz
- 1.2 Special Right Triangles
 - 1.2 Quiz
- 1.3 Six Trig Functions: sin, cos, tan, sec, cosec, cot
 - 1.3 Quiz
- 1.4 Angles of Elevation and Depression
 - 1.4 Quiz
- Unit 1 Assignment

Unit 2. Quadrilaterals & Other Polygons

In this unit we will learn the polygon angle sum theorem to be able to find the sum of interior or exterior angles of any polygon. To find individual angles of regular polygons, and to recognize and identify parallelograms, rhombuses, rectangles, squares, trapezoids, and kites. As well as, the fundamental difference between convex and concave polygons.

2.1 Polygon Angle Sum Theorem

 2.1 Quiz



2.2 Interior & Exterior Angles of Regular Polygons

 2.2 Quiz



2.3 Parallelograms

 2.3 Quiz



2.4 Rhombuses, Rectangles, and Squares

 2.4 Quiz



2.5 Trapezoids & Kites

 2.5 Quiz



2.6 Convex vs. Concave Polygons

 2.6 Quiz



Unit 2 Assignment



Unit 3. Circles

In this unit we will learn the anatomy of circles, including tangent lines, chords, secant lines, radii, and diameters. To find arc measures, inscribed angles, as well as angle measures and segment lengths. We will graph circles on a coordinate plane and to solve for areas and circumferences of circles.

3.1 Tangent Lines

 3.1 Quiz



3.2 Chords

 3.2 Quiz



3.3 Secant Lines

 3.3 Quiz



3.4 Finding Arc Measures

 3.4 Quiz



3.5 Inscribed Angles

 3.5 Quiz



3.6 Angle Measures & Segment Lengths

 3.6 Quiz



3.7 Graphing Cicles on the Coordinate Plane

 3.7 Quiz



3.8 Area & Circumference of Circles

 3.8 quiz



Unit 3 Assignment



Unit 4. Areas & Perimeters of Polygons

In this unit we will learn to find the perimeters of polygons given side lengths as well as the areas of triangles, regardless of their dimensions. To calculate the areas of parallelograms, rhombuses, kites, regular polygons, and trapezoids. To find the areas of sectors, as well as the arc lengths of circles, given a central angle and a radius.

 4.1 Perimeters of Polygons


 4.1 Quiz



 4.2 Areas of Triangles

 4.2 Quiz



 4.3 Areas of Parallelograms

 4.3 Quiz



 4.4 Areas of Trapezoids

 4.4 Quiz



 4.5 Areas of Rhombuses


 4.5 Quiz



 4.6 Areas of Kites


 4.6 Quiz



 4.7 Areas of Regular Polygons


 4.7 Quiz



 4.8 Areas of Sectors of Circles

 4.8 Quiz



 4.9 Arc Lengths in Circles

 4.9 Quiz




 Unit 4 Assignment



Unit 5. Surface Area & Volume

In this unit we will learn to find the surface area of prisms, cylinders, pyramids, and cones. To find the volumes of prisms, cylinders, pyramids, cones, and the volume and surface areas of spheres.

 5.1 Surface Area of Prisms

 5.1 Quiz



 5.2 Surface Area of Cylinders


 5.2 Quiz



 5.3 Surface Area of Pyramids


 5.3 Quiz



 5.4 Surface Area of Cones

 5.4 Quiz



 5.5 Volumes of Prisms


 5.5 Quiz



 5.6 Volumes of Cylinders

 5.6 Quiz




 5.7 Volume of Pyramids

 5.7 Quiz



 5.8 Volumes of Cones

 5.8 Quiz □


 5.9 Surface Area & Volume of Spheres

 5.9 Quiz □

 Unit 5 Assignment □

Unit 6. Transformations


In this unit we will learn the basics of translations, including reflections and rotations. Dilations and lines of symmetry. As well as, to perform compositions of transformations.

 6.1 Translations, Reflections, Rotations

 6.1 Quiz □

 6.2 Dilations

 6.2 Quiz □

 6.3 Symmetry

 6.3 Quiz □

 6.4 Composition of Transformations

 6.4 Quiz □

 Unit 6 Assignment □

The Final Exam

Complete all of the assignments and unit tests in this course. Once they are complete and the assignments have been graded, the Final will be made available and appear below the Practice Final.

Warning: You have only ONE attempt at the Final. You must score 60% or higher in the Final to receive credit for the course!

Are you ready to take the Final? We highly recommend you take the Practice Final first and if you are weak in any area, review the relevant course material again. You have unlimited attempts at the practice final; it will help you to prepare.

Good Luck!!

 Practice Final Exam □


Course Completion

The "Certificate" and "Transcript Request" links below are not active, they cannot be accessed until you have achieved at least 60% on both the final and for the course total. Upon satisfying these two requirements, the links will become active and you can use them.

Before you go, we would appreciate your opinion on the course, please take 1 minute to complete the feedback form. We hope you enjoyed this course!

 Course Feedback

Thank you for taking this course! Let us know what you think about it.

 Request a Course Completion Record

If you need SVHS to send proof of your course completion directly to your school complete this form.

Restricted Not available unless:

- You achieve a required score in **Course total**
- You achieve a required score in **Final Exam**