



Online Courses for High School Students
1-888-972-6237

Geometry

This course builds on the geometry covered in middle school to explore more complex geometric situations and deepen students' ability to explain geometric relationships, moving toward formal mathematical arguments. Specific topics include similarity and congruence, analytic geometry, circles, the Pythagorean theorem, right triangle trigonometry, analysis of three-dimensional objects, conic sections, and geometric modeling.

Prerequisite: Algebra 1

Course Length: Two Semesters

Required Text: Need to check

Materials List: Texas Instruments TI-84 Plus Graphics Calculator, drawing Compass, rulers (standard and metric), protractor, construction paper, measuring tape, six-sided die, scissors, tape.

Course Outline

Semester 1

- Unit 1: Basic Tools and Transformations
- Unit 2: Reasoning and Proof
- Unit 3: Congruence and Constructions
- Unit 4: Analytic Geometry
- Unit 5: Line and Triangle Relationships
- Unit 6: Similarity

Semester 2

- Unit 1: Triangle Similarity
- Unit 2: Area and Volume
- Unit 3: Circles
- Unit 4: Right Triangle Trigonometry
- Unit 5: Conic Sections
- Unit 6: Modeling with Geometry
- Unit 7: Geometry Project