

GEOMETRY

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: Algebra I

Geometry includes the study of geometric element definitions, inductive and deductive reasoning, Venn diagrams, angles, parallel lines, polygons, similarity, triangles, trigonometry, the Pythagorean Theorem, special right triangles, circles, polygon area, surface area and volume of spheres, cylinders, cones, prisms and pyramids, distance calculation, transformations and proofs. Appropriate technology, including calculators and application software, is used regularly for instruction and assessment.

Geometry Lessons

Teacher Message

Lesson 1: Naming Geometric Elements

Lesson 2: Inductive and Deductive Reasoning

Lesson 3: Conditional Statements and Venn Diagrams

Lesson 4: Supplementary and Complementary Angles

Lesson 5: Review: Synthesize Lessons 1-4

Lesson 6: Parallelism

Lesson 7: Polygons

Lesson 8: Similar Polygons

Lesson 9: Review: Synthesize Lessons 6-8

Lesson 10: Triangles

Lesson 11: Introduction to Trigonometry

Lesson 12: Pythagorean Theorem

Lesson 13: Special Right Triangles

Lesson 14: Review: Synthesize Lessons 10-13

Lesson 15: Circles: Chords, Radii, and Arcs

Lesson 16: Circles: Circumference and Arc Length



Lesson 17: Area of Circles and Sectors

Lesson 18: Area of Squares, Rectangles, and Rhombuses

Lesson 19: Review: Synthesize Lessons 15-18

Lesson 20: Area of Triangles, Parallelograms, and Trapezoids

Lesson 21: Areas of Polygons

Lesson 22: Surface Area and Volume of Spheres, Cylinders, and Cones

Lesson 23: Area and Volume of Prisms and Pyramids

Lesson 24: Review: Synthesize Lessons 20-23

Lesson 25: The Cartesian Coordinate System and the Distance Formula

Lesson 26: Transformations

Lesson 27: Proofs

Lesson 28: Review: Synthesize Lessons 25-27

