

Geometry Practice Set Correlation to Standards

Geometry Critical Category Standards-General

SATEC offers the following materials to help prepare students for success with these Standards:

15 Exemplar Lessons with Teacher Notes-SKU—MGEXLS \$30

10 Practice Question Sets (125 Questions)-SKU—MGPQS \$15

5 Benchmark Question Sets (96 Questions)-SKU-MGBQS \$10

SKU—MGEOPB (All of the Above) \$40 for the Bundle

Standard Note: Standards are Common to Most School Geometry Courses		10 Practice Sets Practice Set / Item #
1	Recognize the historical development of geometric systems and know mathematics is developed for a variety of purposes.	CC1 Part 1: #1
1	Compare and contrast the structures and implications of Euclidean and non-Euclidean geometries.	CC1 Part 1: #9, 10
2	Use constructions to explore attributes of geometric figures and to make conjectures about geometric relationships.	CC1 Part 1: #2, 3
2	Make conjectures about angles, lines, polygons, circles, and three-dimensional figures and determine the validity of the conjectures, choosing from a variety of approaches such as coordinate, transformational, or axiomatic.	CC1 Part 1: #4, 5, 6, 7, 8
3	Determine the validity of a conditional statement, its converse, inverse, and contrapositive.	CC1 Part 2: #1, 2
3	Construct and justify statements about geometric figures and their properties.	CC1 Part 2: #3, 4
3	Use logical reasoning to prove statements are true and find counter examples to disprove statements that are false.	CC1 Part 2: #5, 6, 7, 8, 9
3	Use inductive reasoning to formulate a conjecture.	CC1 Part 2: #10, 11, 12
3	Use deductive reasoning to prove a statement.	CC1 Part 2: #13, 14
4	Select an appropriate representation ([concrete,] pictorial, graphical, verbal, or symbolic) in order to solve problems.	CC2 Part 1: #6, 7, 8

5	Use numeric and geometric patterns to develop algebraic expressions representing geometric properties.	CC2 Part 1: #2, 3, 4, 5, 9
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5	Use numeric and geometric patterns to make generalizations about geometric properties, including properties of polygons, ratios in similar figures and solids, and angle relationships, in polygons and circles.	CC2 Part 1: #1 CC2 Part 2: #8
5	Use properties of transformations and their compositions to make connections between mathematics and the real world, such as tessellations.	CC2 Part 1: #8 CC2 Part 2: #5, 6
5	Identify and apply patterns from right triangles to solve meaningful problems, including special right triangles (45-45- 90 and 30-60-90) and triangles whose sides are Pythagorean triples.	CC2 Part 2: #1, 2, 3, 4, 7
6	Describe and draw the intersection of a given plane with various three-dimensional geometric figures.	CC3 Part 1: #1, 2, 3, 4
6	Use nets to represent and construct three-dimensional geometric figures.	CC3 Part 1: #5, 6, 7, 8
6	Use orthographic and isometric views of three-dimensional geometric figures to represent and construct three dimensional geometric figures and solve problems.	CC3 Part 1: #9, 10, 11, 12
7	Use one- and two-dimensional coordinate systems to represent points, lines, rays, line segments, and figures.	CC3 Part 2: #2, 3, 4, 9
7	Use slopes and equations of lines to investigate geometric relationships, including parallel lines, perpendicular lines, and special segments of triangles and other polygons.	CC3 Part 2: #5d, 6, 7, 8, 9, 10 CC3 Part 2: #11, 12, 14
7	[Derive and] use formulas involving length, slope, and midpoint.	CC3 Part 2: #1, 3, 5, 6, 7, 8, 9 CC3 Part 2: #10, 11, 12, 13, 14

8	Find areas of regular polygons, circles, and composite figures.	CC4 Part 1: #1, 2, 3, 5
8	Find areas of sectors and arc lengths of circles using proportional reasoning.	CC4 Part 1: #9, 14
8	[Derive,] extend, and use the Pythagorean Theorem.	CC4 Part 1: #10, 11 CC4 Part 2: #1, 2
8	Find surface areas and volumes of prisms, pyramids, spheres, cones, cylinders, and composites of these figures in problem situations.	CC3 Part 1: #6, 7 CC4 Part 1: #6, 7, 8, 9, 12, 13, 16 CC4 Part 2: #3

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8	Use area models to connect geometry to probability and statistics.	CC4 Part 1: #4, 15
8	Use conversions between measurement systems to solve problems in real-world situations.	CC4 Part 1: #1, 3
9	Formulate and test conjectures about the properties of parallel and perpendicular lines based on explorations and [concrete] models.	CC4 Part 2: #5
9	Formulate and test conjectures about the properties and attributes of polygons and their component parts based on explorations and [concrete] models.	CC4 Part 2: #4, 5
9	Formulate and test conjectures about the properties and attributes of circles and the lines that intersect them based on explorations and [concrete] models.	CC4 Part 2: #6
9	Analyze the characteristics of polyhedral and other three dimensional figures and their component parts based on explorations and [concrete] models.	CC4 Part 2: #7
10	Use congruence transformations to make conjectures and justify properties of geometric figures including figures represented on a coordinate plane.	CC4 Part 2: #9, 10
10	Justify and apply triangle congruence relationships.	CC4 Part 2: #11, 12, 13, 14, 15

11	Use and extend similarity properties and transformations to explore and justify conjectures about geometric figures.	CC4 Part 2: #8 CC5 Part 1: #12, 13, 14
11	Use ratios to solve problems involving similar figures.	CC5 Part 1: #1, 2, 3, 5
11	Develop, apply, and justify triangle similarity relationships, such as right triangle ratios, trigonometric ratios, and Pythagorean triples using a variety of methods.	CC5 Part 2: #1, 2, 3, 4, 5, 6, 7, 8 CC5 Part 2: #9, 10, 11, 12, 13, 14
11	Describe the effect on perimeter, area, and volume when one or more dimensions of a figure are changed and apply this idea in solving problems.	CC3 Part 2: #1d CC5 Part 1: #4, 6, 7, 8, 9, 10, 11