Resource Geometry Semester 2 Final Assessment Blueprint

Year Created: 2024-2025 **Method of Delivery:** Online
Subject: Math **Administration Window:** May Common Finals

Resources

Resource Geometry Curriculum Map

Standards At-A Glance

Standard	Number of Items	Standard Description
MA.9-12.G.G-C.A.2	2	Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.
MA.9-12.G.G-CO.C.11	6	Prove theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and rectangles are parallelograms with congruent diagonals.
MA.9-12.G.G-GMD.A.1	1	Analyze and verify the formulas for the volume of a cylinder, pyramid, and cone.
MA.9-12.G.G-GMD.A.3	2	Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems utilizing real-world context.
MA.9-12.G.G-GPE.A.1	1	Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.
MA.9-12.G.G-GPE.B.4	1	Use coordinates to algebraically prove or disprove geometric relationships algebraically. Relationships include: proving or disproving geometric figures given specific points in the coordinate plane; and proving or disproving if a specific point lies on a given circle.
MA.9-12.G.G-SRT.A.2	1	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.
MA.9-12.G.G-SRT.A.3	1	Use the properties of similarity transformations to establish the AA, SAS, and SSS criterion for two triangles to be similar.
MA.9-12.G.G-SRT.B.4	2	Prove theorems about triangles. Theorems include: an interior line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.
MA.9-12.G.G-SRT.B.5	1	Use congruence and similarity criteria to prove relationships in geometric figures and solve problems utilizing real-world context.
MA.9-12.G.G-SRT.C.6	1	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.
MA.9-12.G.G-SRT.C.7	1	Explain and use the relationship between the sine and cosine of complementary angles.
MA.9-12.G.G-SRT.C.8	2	Use trigonometric ratios (including inverse trigonometric ratios) and the Pythagorean Theorem to find unknown measurements in right triangles utilizing real-world context.

**Some items may be tagged to more than one standard.*

Depth of Knowledge

DOK	Number of Items
Level 1: Recall	6
Level 2: Skill/Concept	15
Level 3: Strategic Thinking	1

Item Types Included

Type	Number of Items	Description
MC	40	Multiple Choice - Select one answer