Geometry Semester 1 Final Assessment Blueprint

Year: 2024-2025	**Method of Delivery:** Online
Subject: Math	**Administration Window:** December 9-19

Resources

Geometry Curriculum Map

Standards At-A Glance

Standard	Number of Items	Standard Description
MA.9-12.G.G-CO.A.1	1	Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.
MA.9-12.G.G-CO.A.2	3	Represent and describe transformations in the plane as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not.
MA.9-12.G.G-CO.A.3	2	Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.
MA.9-12.G.G-CO.A.4	1	Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.
MA.9-12.G.G-CO.A.5	2	Given a geometric figure and a rotation, reflection, or translation draw the transformed figure. Specify a sequence of transformations that will carry a given figure onto another.
MA.9-12.G.G-CO.B.6	1	Use geometric definitions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.
MA.9-12.G.G-CO.B.7	4	Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.
MA.9-12.G.G-CO.B.8	2	Explain how the criteria for triangle congruence (ASA, AAS, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.
MA.9-12.G.G-CO.C.10	7	Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangle are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.
MA.9-12.G.G-CO.C.9	6	Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.
MA.9-12.G.G-CO.D.12	1	Make formal geometric constructions with a variety of tools and methods. Constructions include: copying segments; copying angles; bisecting segments; bisecting angles; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.
MA.9-12.G.G-GPE.B.5	1	Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems, including finding the equation of a line parallel or perpendicular to a given line that passes through a given point.

Some items may be tagged to more than one standard.

Depth of Knowledge

DOK	Number of Items
Level 1: Recall	2
Level 2: Skill/Concept	25
Level 3: Strategic Thinking	4

Item Types Included

Type	Number of Items	Description
MC	31	Multiple Choice - Select one answer