

GEOMETRY

Domain	Code	Standard Description	Essential Vocabulary
Circles	HS-G.C.5	Explain and use the formulas for arc length and area of sectors of circles.	sector, area, radian
	HS-G.CO.5	Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.	
Congruence	HS-G.CO.8	Prove two triangles are congruent using the congruence theorems such as ASA, SAS, and SSS.	ASA, SSS, SAS
	HS-G.CO.9	Prove and apply theorems about lines and angles.	transversal, alternate interior angles, corresponding angles, perpendicular bisector, equidistant, vertical angles
	HS-G.CO.10	Prove and apply theorems about triangle properties	isosceles triangle, base angles, midpoint, median
	HS-G.CO.11	Prove and apply theorems about parallelograms	parallelogram, diagonal, bisect, rectangle, rhombus, quadrilateral, square
Geometric Measurement and Dimension	HS-G.GMD.1	Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone.	prism, cylinder, pyramid, cone, sphere
	HS-G.GMD.3	Know and apply volume formulas for prisms, cylinders, pyramids, cones, and spheres to solve problems.	
Expressing Geometric Properties with Equations	HS-G.GPE.5	Develop and verify the slope criteria for parallel and perpendicular lines. Apply the slope criteria for parallel and perpendicular lines to solve geometric problems using algebra.	
	HS-G.GPE.6	Use coordinates to find the midpoint or endpoint of a line segment. (+) Find the point on a directed line segment between two given points that partitions the segment in a given ratio.	
	HS-G.GPE.7	Use coordinates to compute perimeters of polygons and areas of triangles, parallelograms, trapezoids and kites.	distance formula, perimeter, polygon, trapezoid, kite

North Dakota Priority Standards and Proficiency Scales

MATHEMATICS
Priority Standards

Similarity, Right Triangles, and Trigonometry	HS-G.SRT.5	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	
	HS-G.SRT.8	Use special right triangles (30° - 60° - 90° and 45° - 45° - 90°), trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.	special right triangles

