G.2: Coordinate & Transformational Geometry: Coordinate System	
G.2A(S)	
Skill Code	**Description**
1604007	Determine fractional distance between two points on number line
1604008	Determine fractional distance or fractional point dividing segment into specified ratio
371001	Determine distance between points
79016	Given segment on coordinate plane, determine length
371003	Given endpoints, determine midpoint
Determine	Determine distance or midpoint on a number line
G.2B(R)	
Skill Code	**Description**
1604009	Given coordinates, use length to determine segment congruence
1604010	Given midpoint & endpoint, determine other endpoint on coordinate plane
301015	Given linear graph, determine rate of change
301024	Given two points with integer coordinates, determine rate of change, including zero & undefined
311023	Given two pairs of points, determine if lines containing points are parallel or perpendicular
311001	Given two slope-intercept form equations, identify as parallel or perpendicular
311002	Given two equations in standard form, identify as parallel or perpendicular
311029	Given equation in various forms, determine slope of parallel or perpendicular line
G.2CR)	
Skill Code	**Description**
311031	Given equation in various forms, determine equation of parallel line through specified point
311030	Given equation in various forms, determine equation of parallel or perpendicular line through specified point
311032	Given equation in various forms, determine equation of perpendicular line through specified point
311021	Given equation in slope-intercept form, determine equation of parallel or perpendicular line through specified point
1633010	Determnie equations for parallel & perpendicular lines through specified points
1633011	Determine equations for segments of triangles

G.3: Coordinate & Transformational Geometry: Transformations	
G.3A(S)	
Skill Code	**Description**
1063002	Identify rule or determine translated point on coordinate plane
1063008	Given figure on coordinate plane, determine translated coordinates
1063004	Identify rule or determine transformed point on coordinate plane
1063006	Identify characteristics of dilations
1063005	Identify rule or dilated point on coordinate plane, including variable scale factors
1063033	Identify rule for transformed shape on coordinate plane
1638004	Given scale factor, determine coordinates of image, pre-image centered at origin
1638005	Given scale factor, determine coordinates of image, pre-image not centered at origin
1638006	Given scale factor, determine coordinates of image
1638003	Given scale factor, determine dimension
G.3B(R)	
Skill Code	**Description**
1063101	Composition of transformations on coordinate plane
G.3C(S)	
Skill Code	**Description**
1063500	Given congruent figures, identify description of transformations
1063515	Given similar or congruent figures, identify description of transformations
G.3D(S)	
Skill Code	**Description**
1063003	Identify rule or rotated point on coordinate plane
1063001	Identify rule or reflected point on coordinate plane
1063507	Identify reflections & rotations on coordinate plane
1063016	Identify rule or determine transformed point on coordinate plane
G.4: Logical Argument & constructions: Deductive Reasoning	
G.4A(S)	
Skill Code	**Description**
1634001	Determine definitions of undefined terms of geometry, fill in the blank
1634002	Determine definitions of angles & shapes, fill in the blank

1634004	Determine definitions of conjectures, fill in the blank
1634003	Determine definitions of postulates, fill in the blank
1634005	Determine definitions of theorems, fill in the blank
1634006	Determine definition of general geometry vocabulary, fill in the blank
G.4B(S)	
Skill Code	**Description**
1635001	Given conditional, determine converse & its truth value.
1635002	Given conditional, determine inverse & its truth value.
1635003	Given conditional, determine contrapositive & its truth value.
1635005	Given conditional, determine biconditional
1635007	Convert statements into conditionals or biconditionals
1635008	Given conditional, determine hypothesis & conclusion
G.4C(R)	
Skill Code	**Description**
1635004	Determine truth values of conditionals or identify counterexamples
G.4D(S)	
Skill Code	**Description**
1062017	Given two angle measures in triangle, determine angle measure
1613001	Apply triangle angle sum theorem to determine angles, multiple algebraic expressions
1090002	Identify properties of spherical geometry
1090003	Identify properties of Euclidean & spherical geometry
1090001	Identify triangle angle sums in Euclidean & spherical geometry
G.5: Logical Argument & constructions: Using Constructions	
G.5A(R)	
Skill Code	**Description**
1120008	Given parallel lines with transversal & angle, determine specified angle, algebraic expressions
1062013	Determine angle measures involving parallel lines, algebraic expressions, variables on both sides
1120501	Given nonparallel lines & transversal, identify transversal & specified angle pairs
1620001	Identify properties of polygons
1620003	Determine interior angles or sum of angles in polygons, algebraic expressions
1620005	Determine exterior angles or sum of angles in polygons, algebraic expressions

1062023	Identify components of circles
G.5B(S)	
Skill Code	**Description**
1604003	Apply segment addition postulate
1604004	Apply segment addition postulate, algebraic expressions
1604006	Apply segment addition postulate, including algebraic expressions
1604005	Given midpoint, apply segment addition postulate, algebraic expressions
1660001	Determine steps in geometric constructions
G.5C(S)	
Skill Code	**Description**
1631004	Given geometric figure, identify correct conjecture
1624001	Apply angle addition postulate to determine angle measure
1624002	Apply angle addition postulate to determine angle measure, algebraic expressions
G.5D(S)	
Skill Code	**Description**
79003	Given three sides, classify triangles
79013	Apply converse of Pythagorean theorem
1616002	Apply triangle inequality theorem to determine range of values for unknown side
G.6: Proof & Congruence: Deductive Reasoning	
G.6A(R)	
Skill Code	**Description**
1110105	Given complementary angles, determine angle measure, multiple algebraic expressions
1110102	Given supplementary angles, determine angle measure, multiple algebraic expressions
1110108	Given vertical angles, determine angle measure, multiple algebraic expressions
1110110	Given vertical angles, determine supplementary angle measure, algebraic expressions
1110116	Determine complementary, supplementary, or equivalent angle measures, algebraic expressions
1120008	Given parallel lines with transversal & angle, determine specified angle, algebraic expressions
1624004	Apply angle addition postulate to determine angle measures, including algebraic expressions
G.6B(R)	
Skill Code	**Description**

1632004	Determine missing steps in proofs involving SAS triangles
1632003	Determine missing steps in proofs involving SSS triangles
1632006	Determine missing steps in proofs involving ASA triangles
1632005	Determine missing steps in proofs involving AAS triangles
1632021	Determine missing steps in proofs involving triangle congruence theorems
1632017	Determine missing steps in proofs involving triangle congruence theorems, paragraph form
G.6C(S)	
Skill Code	**Description**
1631003	Identify corresponding parts from congruence statement or determine congruence statement from figures
1631002	Given congruent triangles, determine values from corresponding parts
1632018	Determine missing steps in proof involving corresponding parts
1632019	Determine missing steps in proofs involving corresponding parts, paragraph form
1632014	Determine missing steps in paragraph form proofs
G.6D(S)	
Skill Code	**Description**
1614004	Determine angles & order side lengths & angles in triangles, including algebraic expressions
1613003	Apply triangle angle sum theorem & exterior angle theorem to determine angles, including algebraic expressions
1602001	Given triangle with algebraic expressions, apply Pythagorean theorem to determine side
1612005	Given perpendicular or angle bisector in triangle, determine segment lengths or angles, including algebraic expressions
1619004	Solve problems involving perimeter of equilateral & isosceles triangles
1617005	Apply triangle midsegment theorem to determine perimeter
G.6E(S)	
Skill Code	**Description**
1623002	Identify or determine parallelograms in coordinate plane
1606007	Given parallelogram, determine sides & angles, including diagonals
1606005	Given three points, determine fourth point to make parallelogram
1606008	Given three points, determine fourth point to make parallelogram, variable coordinates

1611006	Given trapezoid, determine lengths or angle measures, including diagonals
1608004	Given rhombus, determine angle measures, including diagonals
G.7: Similarity, Proof, & Trigonomety: Similarity	
G.7A(S)	
Skill Code	**Description**
1060017	Identify corresponding parts of similar figures
1062046	Given similar figures, identify proportion of side lengths
1640006	Given similar squares, determine area & side length
G.7B(R)	
Skill Code	**Description**
1060015	Determine angles of similar triangles using AA similarity
1060018	Determine angles of similar triangles using AA similarity, algebraic expressions
1060019	Determine sides of similar triangles using AA similarity
1060500	Determine similarity of triangles using AA similarity
1060016	Given right triangle with altitude from right angle, identify similar triangles.
G.8: Similarity, Proof, & Trigonomety: Proofs	
G.8A(S)	
Skill Code	**Description**
1632015	Determine missing steps in proofs involving similar triangles
1632016	Determine missing steps in proofs involving similar triangles, paragraph form
1060020	Determine similar triangles using SAS or SSS similarity
1060011	Determine parts using similar triangles, including real-world context
1060012	Determine segment lengths using triangle proportionality theorem
1060002	Determine edge, surface area, or volume of similar solids
1060010	Identify similar polygons
G.8B(S)	
Skill Code	**Description**
1050001	Apply geometric mean to determine altitude
1050002	Apply geometric mean to determine length with specified altitue
1050003	Apply geometric mean to determine shorter leg of triangle
1050004	Appy geometric mean to determine longer leg of triangle
1050007	Apply geometric mean to determine length of longer part of hypotenuse

1050008	Apply geometric mean to determine length of shorter part of hypotenuse
1050009	Apply geometric mean to determine length of segment of hypotenuse, legs given
G.9: Similarity, Proof, & Trigonomety: Trigonometry	
G.9A(R)	
Skill Code	**Description**
1621001	Determine sides of triangles using law of sines
1621003	Determine sides & angles of triangles using law of sines
1622003	Determine sides & angles of triangles using law of cosines
1080018	Given side & angle, determine specified side using sine, cosine, or tangent
1080032	Given right triangle, determine side, real-world context
1080033	Given right triangle, determine angle, real-world context
1080009	Given hypotenuse & let of right triangle, determine angle using arcsine
1080008	Given hypotenuse & leg of right triangle determine angle using arccosine
1080012	Given legs of right triangle, determine angle using arctangent, real-world context
G.9B(R)	
Skill Code	**Description**
1070006	Given 30-60-90 triangle & short leg, determine hypotenuse
1070008	Given 30-60-90 triangle & long leg, determine hypotenuse
1070007	Given 30-60-90 triangle & long leg, determine short leg
1070009	Given 30-60-90 triangle & hypotenuse, determine short leg
1070014	Given special right triangle, determine side
1070032	Determine angles or sides using special right triangle relationships, real-world context
G.10: Two-dimensionsl & Three-Dimensional Figures	
G.10A(R)	
Skill Code	**Description**
1151001	Determine cross sections of prisms
1151002	Determine cross section of pyramids
1151003	Determine cross sections of cylinders
1062082	Determine cross sections of 3D figures
1151006	Determine cross sections of cylinders, pyramids, & cones
1151004	Determine 3D figures from revolutions of 2D figures
G.10B(R)	
Skill Code	**Description**
1062401	Compare measurements drawn with different scale factors

1062041	Compare measurements of shapes with scaled dimensions, including 3D shapes
G.11 Two-dimensionsl & Three-Dimensional Figures: Application	
G.11A(S)	
Skill Code	**Description**
1636001	Determine apothem, area, or side length of regular triangle
1636002	Determine apothem, area, or side length of regular pentagon
1636003	Determine apothem, area, or side length of regular hexagon
1636004	Determine apothem, area, or side length of regular heptagon
1636005	Determine apothem, area, or side length of regular octagon
1636006	Determine apothem, area, or side length of regular polygon
G.11B(R)	
Skill Code	**Description**
1042071	Determine area of composite figures, rectangle with various figures attached, no circular parts
1062028	Determine area of composite figures, no circular shapes
1062032	Determine area of composite figures on coordinate plane, no circular shapes.
1040205	Determine area of composite figures
G.12 Circles	
G.12A(S)	
Skill Code	**Description**
1100120	Given intersecting chords, determine angle or arc measure
1100201	Given two diameters, radius, & two angles, determine angle or arc measure
1626003	Given tangents to circles, determine lengths, algebraic expressions
1100112	Given inscribed right triangle, determine angle or arc measure
1628015	Given secants, tangents, & chords, determine angles
1100110	Determine inscribed angles, central angles, & arc measures
G.12B(S)	
Skill Code	**Description**
1100301	Given arc measure & radius, determine arc length
1100001	Given arc length & radius, determine central angle
1100002	Given arc length & central angle, determine circumference
1100003	Determine circumferences, arc lengths, & central angles
G.12C(S)	
Skill Code	**Description**
1100311	Determine area of sector
1100313	Given radius & arc measure, determine area of circular segment

1100315	Given chord length & arc measure, determine area of circular segment
1100317	Given radius & arc of 60, 90, or 120 degrees, determine area of circular segment
1100319	Given chord length & arc measures of 60, 90, or 120 degrees, determine area of circular segment
1100321	Determine area of circular segments
G.12D(S)	
Skill Code	**Description**
1300052	Convert radians to degrees
1300051	Convert degrees to radians
1300053	Convert between degrees & radians
1300010	Given arc length & radius, determine radian measure
G.12E(S)	
Skill Code	**Description**
1637004	Given equation of circle, identify center & radius
1637001	Given center & radius, determine equation of circle
1637002	Given graph, determine equation of circle
1637003	Given equation of circle, determine area
1637005	Determine circle equations, centers, radii, & areas
G.13 Probability	
G.13A(S)	
Skill Code	**Description**
601011	Determine permutations using all items, real-world context
601013	Determine permutations, real-world context
601021	Determine permutations, one non-distinct item, real-world context
601023	Determine permutations, multiple non-distinct items, real-world context
601502	Determine permutation of letters in word, including non-distinct letters
601019	Determine combinations & permutations, two questions, real-world context
601017	Determine combinations & permutations, four questions, real-world context
601015	Determine combinations, real-world context
G.13B(S)	
Skill Code	**Description**
1630001	Determine probabilities from shaded areas of geometric figures, real-world context
G.13C(R)	

Skill Code	Description
600012	Given visual model, determine "or" probability
600014	Determine "or" probabilities as fractions
512121	Determine "or" probabilities
600010	Determine "and' probabilities, independent & dependent events
512117	Determine "and" probabilities, independent events, visuals provided
G.13D(S)	
Skill Code	**Description**
600002	Determine probabilities & complementary probabilities of single events, including visual models
512101	Determine theoretical probabilities, fraction answers
512109	Determine experimental probabilities, fraction answers
512111	Determine predicted values, experimental probability
G.13E(S)	
Skill Code	**Description**
512113	Determine "and" probabilities, independent events, two distinct sample spaces
512115	Determine "and" probabilities, independent events, same sample space