

<b>Geometry Pacing Guide</b>		<b>KEY:</b>
This Pacing Guide was revised in June 2017.		Blue = 2016 SOL standard
Chapters referenced are from old adopted text, Glencoe: Geometry.		Black = 2009 and 2016 standard
		Red = 2009 SOL standard
<b>SOL #</b>	<b>Standards</b>	<b>Textbook</b>
<b>First Quarter</b>		
G.3a	a) The student will solve problems involving symmetry and transformation. This will include investigating and using formulas for determining distance, midpoint, and slope	Ch 1
G.1b	b) The student will use deductive reasoning to construct and judge the validity of a logical argument consisting of a set of premises and a conclusion. This will include translating a short verbal argument into symbolic form	2.2
G.1c	c) The student will construct and judge the validity of a logical argument consisting of a set of premises and a conclusion. This will include using Venn diagrams to represent set relationships	2.2
G.1a	a) The student will use deductive reasoning to construct and judge the validity of a logical argument consisting of a set of premises and a conclusion. This will include identifying the converse, inverse, and contrapositive of a conditional statement	2.3 (Supplement Biconditional Symbol and Therefore)
G.1c, G.1d	c) The student will use deductive reasoning to construct and judge the validity of a logical argument consisting of a set of premises and a conclusion. This will include determining the validity of a logical argument.	2.4 - 2.7
G.2b, G.2c	b) The student will use the relationships between angles formed by two lines intersected by a transversal to solve problems, including practical problems, involving angles formed when parallel lines are intersected by a transversal	2.8
G.2a	a) The student will use the relationships between angles formed by two lines intersected by a transversal to prove two or more lines are parallel	3.1 & 3.2
G.2b, G.2c	b) The student will use the relationships between angles formed by two lines intersected by a transversal to solve problems, including practical problems, involving angles formed when parallel lines are intersected by a transversal	3.2 & 3.5
G.3b	b) The student will solve problems involving symmetry and transformation this will include applying slope to verify and determine whether lines are parallel or perpendicular	3.3 & 3.6
<b>Second Quarter</b>		
G.6	The student, given information in the form of a figure or statement, will prove two triangles are congruent	Ch 4 (Supplement HL)
G.5a	a) The student, given information concerning the lengths of sides and/or measures of angles in triangles, will solve problems, including practical problems. This will include ordering the sides by length, given angle measures (Include Bisectors, Medians, and Altitudes of Triangles)	5.1 & 5.2
G.5b	b) The student, given information concerning the lengths of sides and/or measures of angles in triangles, will solve problems, including practical problems. This will include ordering the angles by degree measure, given side lengths	5.2
G.5c	c) The student, given information concerning the lengths of sides and/or measures of angles in triangles, will solve problems, including practical problems. This will include determining whether a triangle exists	5.2

G.5d	d) The student, given information concerning the lengths of sides and/or measures of angles in triangles, will solve problems, including practical problems. This will include determining the range in which the length of the third side must lie	5.4 & 5.5
G.7	The student, given information in the form of a figure or statement, will prove two triangles are similar	6.1 - 6.5
<b>Third Quarter</b>		
G.8a	a) The student will solve problems, including practical problems, involving right triangles. This will include applying the Pythagorean Theorem and its converse	7.2
G.8b	b) The student will solve problems, including practical problems, involving right triangles. This will include applying properties of special right triangles	7.3
G.8c	c) The student will solve problems, including practical problems, involving right triangles. This will include applying trigonometric ratios	7.4 & 7.5 (Supplement relationship between sine and cosine of complementary angles)
G.10a	a) The student will solve problems, including practical problems, involving angles of convex polygons. This will include determining the sum of the interior and/or exterior angles	8.1
G.10b	b) The student will solve problems, including practical problems, involving angles of convex polygons. This will include determining the measure of an interior and/or exterior angle	8.1
G.10c	c) The student will solve problems, including practical problems, involving angles of convex polygons. This will include determining the number of sides of a regular polygon	8.1
G.9	The student will verify and use properties of quadrilaterals to solve problems, including practical problems	8.2 - 8.7
G.3c	c) The student will solve problems involving symmetry and transformation. This will include investigating symmetry and determining whether a figure is symmetric with respect to a line or a point	Ch 9
G.3d	d) The student will solve problems involving symmetry and transformation. This will include determining whether a figure has been translated, reflected, rotated, or dilated, using coordinate methods	Ch 9
G.13	The student will use surface area and volume of three-dimensional objects to solve practical problems	11.1 - 11.4
G.11d, G.11c	d) The student will solve problems, including practical problems, by applying properties of circles. This will include determining area of a sector	11.5
<b>Fourth Quarter</b>		
G.11d, G.11c	d) The student will solve problems, including practical problems, by applying properties of circles. This will include determining area of a sector	10.1
G.11c	c) The student will solve problems, including practical problems, by applying properties of circles. This will include determining arc length	10.2
G.11a	a) The student will solve problems, including practical problems, by applying properties of circles. This will include determining angle measures formed by intersecting chords, secants, and/or tangents	10.3-10.6 (Supplement Inscribed and Circumscribed Circles)
G.11b	b) The student will solve problems, including practical problems, by applying properties of circles. This will include determining lengths of segments formed by intersecting chords, secants, and/or tangents	10.7
G.12	The student will solve problems involving equations of circles	10.8

G.13	The student will use surface area and volume of three-dimensional objects to solve practical problems	Ch 12 & Ch 13
G.14a	a) The student will apply the concepts of similarity to two- or three-dimensional geometric figures. This will include a) comparing ratios between lengths, perimeters, areas, and volumes of similar figures	13.4
G.14b	b) The student will apply the concepts of similarity to two- or three-dimensional geometric figures. This will include determining how changes in one or more dimensions of a figure affect area and/or volume of the figure	supplement
G.14c	c) The student will apply the concepts of similarity to two- or three-dimensional geometric figures. This will include determining how changes in area and/or volume of a figure affect one or more dimensions of the figure	supplement
G.14d	d) The student will apply the concepts of similarity to two- or three-dimensional geometric figures. This will include solving problems, including practical problems, about similar geometric figures	Ch 12 & Ch 13
G.4a	a) The student will construct and justify the constructions of a line segment congruent to a given line segment	supplement
G.4b	b) The student will construct and justify the constructions of the perpendicular bisector of a line segment	supplement
G.4c	c) The student will construct and justify the constructions of the perpendicular to a given line from a point not on the line	supplement
G.4d	d) The student will construct and justify the constructions of a perpendicular to a given line at a given point on the line	supplement
G.4e	e) The student will construct and justify the constructions of the bisector of a given angle	supplement
G.4f	f) The student will construct and justify the constructions of an angle congruent to a given angle	supplement
G.4g	g) The student will construct and justify the constructions of a line parallel to a given line through a point not on the line	supplement
G.4h	h) The student will construct and justify the constructions of an equilateral triangle, a square, and a regular hexagon inscribed in a circle	supplement
G.4	The student will construct an inscribed and circumscribed circles of a triangle, and a tangent line from a point outside a given circle to the circle	supplement