

	Geometry	
Benchmark/ Target Month	Pass Standard/Content	Section
	<u>Standard 1: Logical Reasoning – The student will use deductive reasoning and inductive reasoning to solve problems.</u>	
Sept Sept, Oct	1. Identify and use logical reasoning skills to make and test conjectures, formulate counter examples, and follow logical arguments.	2.1-2.4 2.5, 4.7, 4.8, 11.7
Sept	2. State, use, and examine the validity of the converse, invers, and contrapositive of “if then” statements.	11.7
Sept	3. Compare the properties of Euclidean geometry to non-Euclidean geometries	1.8
	<u>Standard 2: Properties of 2-Dimensional Figures – The student will use the properties and formulas of geometric figures to solve problems.</u>	
Aug Aug	1. Use geometric tools (protractor, compass, strait edge) to construct a variety of figures.	1.2
Aug Aug	2. Line and Angle relationships	1.1-1.3
Sept	a. Use the angle relationships formed by parallel lines cut by a transversal to solve problems.	2.5, 2.6
Sept	b. Use the angle relationships formed by two lines cut by a transversal to determine if the two lines are parallel and verify, using algebraic and deductive proofs.	2.5, 2.6
Aug Aug	c. Use relationships between pairs of angles (adjacent, complementary, vertical, etc.) to solve problems.	1.1, 1.2
Aug Nov	3. Polygons and Other Plane Figures	1.4-1.6
Aug Nov	a. Identify, describe, and analyze polygons (convex, concave, regular, pentagonal, n-gonal, etc.)	1.4-1.6
Nov Nov, Dec	b. Apply the interior and exterior angle sum of convex polygons to solve problems, and verify using algebraic and deductive proofs.	5.1, 5.2
Nov Nov, Dec	c. Develop and apply the properties of quadrilaterals to solve problems.	5.3-5.6
Jan	d. Use properties of 2-dimensional figures and side length, perimeter or circumference, and area to determine unknown values and correctly identify the appropriate unit of measure of each.	Chap. 6, 8
April April	4. Similarity	
April April	a. Determine and verify the relationships of similarity of triangles, using algebraic and deductive proofs.	11.2, 11.4
April April	b. Use ratios of similar 2-dimensional figures to determine unknown values, such as angles, side lengths, perimeter or circumference, and area.	11.1, 11.5, 11.6
Oct	5. Congruence	
Oct	a. Find angle measures and are measures related to circles.	4.4, 4.5
Oct	b. Find angle measures and segment lengths using the relationships among radii, chords, secants, and tangents of a circle.	4.4, 4.5
Dec	6. Circles	
Dec	a. Find angle measures and arc measures related to circles.	6.1-6.7
Dec	b. Find angle measures and segment lengths using the relationships among radii, chords, secants, and tangents of a circle.	6.5-6.7
	<u>Standard 3: Triangles and Trigonometric Ratios – The student will use the properties of right triangles and trig. ratios to solve problems.</u>	
Feb	1. Use the Pythagorean Theorem and its converse to find missing side lengths and to determine acute, right, and obtuse triangles, and verify using algebraic and deductive proofs.	9.1, 9.2
Feb	2. Apply the 45-45-90 and 30-60-90 right triangle relationships to solve problems, and verify using algebraic and deductive proofs.	9.3
April	3. Express the trig functions as ratios and use sine, cosine, and tangent ratios to solve real-world problems.	12.1
April	4. Use the trig ratios to find the area of a triangle.	12.3
	<u>Standard 4: Properties of 3-Dimensional Figures – The student will use the properties and formulas of geometric figures to solve problems.</u>	
March March	1. Polyhedra and Other Solids	10.1
March March	a. Identify, describe, and analyze polyhedral (for example, regular, decahedral)	10.1, 10.2, chap 9
March March	b. Use properties of 3-dimensional figures; side lengths, perimeter or circumference, and area of a face; and volume, lateral area, and surface area to determine unknown values and correctly identify the appropriate unit of measure of each.	10.1, 10.2, chap 9
April	2. Similarity: Use ratios of similar 3-dimensional figures to determine unknown values, such as angles, side lengths, perimeter or circumference of a face, area of a face, and volume.	11.5, 11.6
Sept	3. Create a model of a 3-D figure form a 2-D and vice versa (nets, blueprints, perspective drawings).	1.8
	<u>Standard 5: Coordinate Geometry – The student will solve problems with geometric figures in the coordinate plane.</u>	
Aug, Sept, Feb	1. Find the distance between two points; the midpoint of a segment; and calculate the slopes of parallel, perpendicular, horizontal, and vertical lines.	Pg36, 167, 9.5
Aug April	2. Properties of figures	1.4-1.6
Aug April	a. Given the set of points, determine the type of figure formed based on its properties.	1.4-1.6
Aug April	b. Use transformations (reflection, rotation, translation) of geometric figures to solve problems within coordinate geometry.	Chap 7 review

