

CCS COURSE MAP

SUBJECT: GEOMETRY

GRADE LEVEL 9th-10th GRADE
COURSE LENGTH YEAR

REVIEWED 2018-2019

Student Goals:																													
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UNIT/ WEEKS	STANDARD	OBJECTIVES	ACTIVITIES/ASSESSMENT	RESOURCES	BIBLICAL INTEGRATION																								
1. Tools of Geometry 5 weeks	9.3.2.1 (part of the standard) 9.3.4.4	Students will be able to make nets and drawings of 3- dimensional figures and basic constructions using a straightedge and compass. Students will understand basic terms and postulates of geometry. Students will be able to find lengths of	Classroom discussions/lecture/demonstration by teacher and students. In-class work. Homework Quiz/test	Pearson Geometry © 2012 Scientific calculator Chapter notes	Students will be able to use mathematics as a tool to explore and manage God's creation and to glorify God, especially for His created order in mathematics																								

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		<p>segments, midpoints, measures of angles, and identify and compare angles and special angles.</p> <p>Students will be able to find area and perimeter or circumference of basic shapes.</p>			
<p>2. Reasoning and Proof</p> <p>3 weeks</p>	<p>9.3.2.1 9.3.2.2 9.3.2.4</p>	<p>Students will be able to use inductive reasoning and deductive reasoning to make conjectures.</p> <p>Students will be able to write converses, inverses, contrapositives, converses and biconditionals.</p> <p>Students will be able to use properties of equality.</p> <p>Students will be able to prove and apply theorems about</p>	<p>Classroom discussions/lecture/demonstration by teacher and students.</p> <p>In-class work.</p> <p>Homework</p> <p>Quiz/test</p>	<p>Pearson Geometry © 2012</p> <p>Scientific calculator</p> <p>Chapter notes</p>	<p>Students will be able to use mathematics as a tool to explore and manage God's creation and to glorify God, especially for His created order in mathematics</p>

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		angles.			
3. Parallel and Perpendicular Lines 4 to 5 weeks	9.3.3.1 9.3.3.2 9.3.2.4	<p>Students will be able to use properties of parallel lines to find angle measures and determine whether lines are parallel.</p> <p>Students will be able to relate parallel and perpendicular lines and relate slope to parallel and perpendicular lines.</p> <p>Students will be able to use parallel lines to prove theorems about triangles and find measures of angles of triangles.</p>	<p>Classroom discussions/lecture/demonstration by teacher and students.</p> <p>In-class work.</p> <p>Homework</p> <p>Quiz/test</p>	<p>Pearson Geometry © 2012</p> <p>Scientific calculator</p> <p>Chapter notes</p>	<p>Students will be able to use mathematics as a tool to explore and manage God's creation and to glorify God, especially for His created order in mathematics</p>

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		<p>Students will be able to construct parallel and perpendicular lines.</p> <p>Students will be able to graph and write linear equations .</p>			
<p>4. Congruent Triangles</p> <p>3 weeks</p>	<p>9.3.3.3 9.3.2.4</p>	<p>Students will be able to recognize congruent figures and their corresponding parts.</p> <p>Students will be able to prove two triangles congruent using SSS, SAS, ASA, AAS, HL, corresponding parts,</p> <p>Students will be able to use and apply properties of isosceles and equilateral triangles.</p>	<p>Classroom discussions/lecture/demonstration by teacher and students.</p> <p>In-class work.</p> <p>Homework</p> <p>Quiz/test</p>	<p>Pearson Geometry © 2012</p> <p>Scientific calculator</p> <p>Chapter notes</p>	<p>Students will be able to use mathematics as a tool to explore and manage God’s creation and to glorify God, especially for His created order in mathematics</p>

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<p>5. Relationships Within Triangles</p> <p>3 to 4 weeks</p>	<p>9.3.2.4</p>	<p>Students will be able to use properties of midsegments, perpendicular bisectors, angle bisectors, medians, altitudes to solve problems involving triangles.</p> <p>Students will be able to use inequalities involving angles and sides of triangles.</p> <p>Students will be able to use indirect reasoning to write proofs.</p>	<p>Classroom discussions/lecture/demonstration by teacher and students.</p> <p>In-class work.</p> <p>Homework</p> <p>Quiz/test</p>	<p>Pearson Geometry © 2012</p> <p>Scientific calculator</p> <p>Chapter notes</p>	<p>Students will be able to use mathematics as a tool to explore and manage God's creation and to glorify God, especially for His created order in mathematics</p>
<p>6. Polygons and Quadrilaterals</p> <p>4 weeks</p>	<p>9.3.3.7 9.3.4.4 9.3.2.4</p>	<p>Students will be able to find the sum of interior and exterior angles of polygons.</p> <p>Students will be able to use relationships among sides and angles and among diagonals of parallelograms.</p> <p>Students will be able</p>	<p>Classroom discussions/lecture/demonstration by teacher and students.</p> <p>In-class work.</p> <p>Homework</p> <p>Quiz/test</p>	<p>Pearson Geometry © 2012</p> <p>Scientific calculator</p> <p>Chapter notes</p>	<p>Students will be able to use mathematics as a tool to explore and manage God's creation and to glorify God, especially for His created order in mathematics</p>

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		to determine whether a quadrilateral is a parallelogram, a rhombus, a rectangle, a square, trapezoid, and/or kite and classify polygons in the coordinate plane.			
7. Similarity 3 weeks	9.3.3.6 9.3.2.4	<p>Students will be able to write ratios and solve proportions.</p> <p>Students will be able to identify and apply similar polygons.</p> <p>Students will be able to use the Triangle AA, SAS, and SSS Similarity, Side-Splitter, and Triangle-Angle-Bisector postulates and theorems.</p> <p>Students will be able to find and use relationships in</p>	<p>Classroom discussions/lecture/demonstration by teacher and students.</p> <p>In-class work.</p> <p>Homework</p> <p>Quiz/test</p>	<p>Pearson Geometry © 2012</p> <p>Scientific calculator</p> <p>Chapter notes</p>	<p>Students will be able to use mathematics as a tool to explore and manage God's creation and to glorify God, especially for His created order in mathematics</p>

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		similar right triangles.			
8. Right Triangles and Trigonometry 4 weeks	9.3.3.4 9.3.3.5 9.3.4.1 9.3.4.2 9.3.4.3 9.3.4.7 9.3.2.4	Students will be able to use the Pythagorean Theorem. Students will be able to use properties of special right triangles. Students will be able to use sine, cosine, and tangent to determine side lengths and angle measures in right triangles. Students will be able to use the Law of	Classroom discussions/lecture/demonstration by teacher and students. In-class work. Homework Quiz/test	Pearson Geometry © 2012 Scientific calculator Chapter notes	Students will be able to use mathematics as a tool to explore and manage God's creation and to glorify God, especially for His created order in mathematics

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		Sines and the Law of Cosines.			
9. Transformations 2 to 3 weeks	9.3.4.6	Students will be able to find translations, transformations, reflections, rotations and dilations of figures. Students will be able to identify and prove congruence and/or similarity of figures.	Classroom discussions/lecture/demonstration by teacher and students. In-class work. Homework Quiz/test	Pearson Geometry © 2012 Scientific calculator Chapter notes	Students will be able to use mathematics as a tool to explore and manage God's creation and to glorify God, especially for His created order in mathematics

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<p>10. Area 2 to 3 weeks.</p>	<p>9.3.2.1 (Part of the standard)</p>	<p>Students will be able to find the area of parallelograms, triangles, trapezoids, rhombuses, kites, regular polygons,</p> <p>Students will be able to find the perimeters and areas of similar polygons.</p> <p>Students will be able find the measures of central angles and arcs and find circumference, arc length, and areas of circles, sectors and segments of circles.</p>	<p>Classroom discussions/lecture/demonstration by teacher and students.</p> <p>In-class work.</p> <p>Homework</p> <p>Quiz/test</p>	<p>Pearson Geometry © 2012</p> <p>Scientific calculator</p> <p>Chapter notes</p>	<p>Students will be able to use mathematics as a tool to explore and manage God's creation and to glorify God, especially for His created order in mathematics</p>
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