

**Planned Course of Study**

**GEOMETRY I**

**Grades 10 - 12**

**Mathematics Department**

**Salisbury Township School District**

**1140 Salisbury Road**

**Allentown, PA 18103**

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 1</p> <p>To use the terms point, line, line segment, ray, plane, collinear, coplanar, skew, and intersection and be able to represent them symbolically and pictorially.</p>	<p>Given a drawing, the student will identify all points, lines, line segment, rays, planes, collinear points, coplanar lines, skew lines.</p> <p>Students will sketch pictures to represent each term or combinations of terms based on given parameters.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.95 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 2</p> <p>To use the terms congruent segments, midpoint of a segment, and bisector of a segment and be able to represent them pictorially.</p>	<p>Using a compass and straight edge, the student will construct congruent segments and the midpoint of a segment.</p> <p>Given a drawing, the student will identify congruent segments, midpoints, and bisectors of segments and use this to solve for missing lengths.</p> <p>Students will sketch pictures to represent each term or combinations of terms based on the given parameters.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.95. A</p> <p>2.1.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 3</p> <p>To use the terms angle, sides of the angle, vertex, acute angle, right angle, obtuse angle, straight angle, congruent angles, adjacent angles, and bisector of an angle and be able to represent them symbolically and pictorially.</p>	<p>Given a drawing, the student will classify all angles by their measurement.</p> <p>Given a drawing, the student will name different angles or pairs of angles and use this to solve for missing angle measures.</p> <p>Given a drawing, the student will identify congruent angles and bisectors of angles and use this to solve for missing angle measures.</p> <p>Given a drawing the student will recognize what can be concluded from the diagram and use this information to solve for missing angle and segment measures.</p> <p>Students will sketch pictures to represent each term or combinations of terms based on given parameters.</p> <p>Using a compass and straight edge, the student will construct congruent angles and bisectors of angles.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.9.8 A</p> <p>2.1.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 4</p> <p>The student will be able to use postulates and theorems relating points lines, and planes.</p>	<p>Through diagrams, the student will use the postulates and theorems to draw conclusions.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.3.11 B</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 5</p> <p>Recognize the hypothesis, conclusion, and converse of conditional (if-then) statements.</p>	<p>Students will analyze conditional statements to determine the hypothesis, conclusion, and converse and determine if the converse is also true.</p> <p>.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.4.11 D</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 6</p> <p>Using properties from algebra and definitions, postulates and theorems from geometry, the students will to set up and use the two-column proof format to prove theorems.</p>	<p>Students will supply reasons to two column proofs already written.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.4.11. A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 7</p> <p>To use the terms complementary angles, supplementary angles, and vertical angles, and to be able to represent them pictorially.</p>	<p>Given a drawing, the student will identify all complementary, supplementary and vertical angles and use this information to solve for missing angle measures.</p> <p>Students will sketch pictures to represent each term or combinations of terms based on given parameters.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.4.11. E</p> <p>2.3.11 B</p> <p>2.1.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 8</p> <p>To use the term perpendicular in relationship to lines and segments and be able to represent it symbolically and pictorially.</p>	<p>Given a drawing, the student will identify lines and or segments that are perpendicular and use this to solve for missing measurements.</p> <p>Students will sketch pictures to represent the terms based on the given parameters.</p> <p>Using a compass and straight edge, the student will construct perpendicular lines and the perpendicular bisector of a segment.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.4.11 E</p> <p>2.1.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 9</p> <p>To use the terms parallel lines, transversal, alternate interior angles, same-side interior angles, and corresponding angles and be able to represent them symbolically and/or pictorially.</p>	<p>Through exploration, the students will discover the relationships that exist among these types of angles and parallel lines.</p> <p>Given drawings, the student will identify all types of angles and use this to solve for missing measurements.</p> <p>Students will sketch pictures to represent each term or combinations of terms based on the given parameters.</p> <p>Using a compass and straight edge, the student will construct parallel lines.</p> <p>Students will supply reasons to two-column proofs already written.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.9.11 A</p> <p>2.9.11 E</p> <p>2.1.11 A</p> <p>2.4.11. A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 10</p> <p>To classify triangles according to their sides and their angles and solve problems related to triangles.</p>	<p>Through exploration, students will discover the relationships that exist among the angles of a triangle.</p> <p>Given a drawing, students will identify the type of triangle that is represented.</p> <p>Students will sketch pictures to represent each type of triangle and use the information to solve for missing measurements.</p> <p>Students will supply reasons to two-column proofs already written.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests.</p>	<p>2.9.5 B</p> <p>2.4.11 A</p> <p>2.1.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 11</p> <p>To use the terms polygon, convex, concave, diagonal, and regular and be able to represent them pictorially and solve problems related to these terms.</p>	<p>Through exploration, students will discover the relationships that exist among the angles of any polygon.</p> <p>Given a drawing, students will identify the type of polygon that is represented.</p> <p>Students will sketch pictures to represent each type of polygon and use the information to solve for missing measurements.</p> <p>Students will use the theorems to solve application problems related to polygons.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.9.8 C</p> <p>2.4.11 B</p> <p>2.4.11 E</p> <p>2.1.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 13</p> <p>To identify the corresponding parts of congruent figures.</p>	<p>Through exploration students will derive the definition of congruent figures.</p> <p>Given a drawing, the student will identify corresponding parts of congruent figures.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.9.11 I</p> <p>2.4.11 C</p> <p>2.1.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 15</p> <p>To apply the definitions of median, altitude, perpendicular bisector, and angle bisector of a triangle and relate them to the concept of concurrent lines.</p>	<p>Using a compass and straight edge, the student will construct the three medians, altitudes, perpendicular bisectors, and angle bisectors of a triangle.</p> <p>Through exploration exercises, the students will discover how concurrent lines relate to the medians, altitudes, perpendicular bisectors, and angle bisectors of a triangle.</p> <p>Given a drawing, the students will solve for missing measurements in the triangle.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.9.11 D</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 16</p> <p>To apply the definition and properties of a parallelogram and be able to prove a quadrilateral is a parallelogram.</p>	<p>Through exploration exercises, the student will discover the properties of a parallelogram.</p> <p>Given a drawing, the students will identify if the quadrilateral is a parallelogram and solve for missing measurements.</p> <p>Using a compass and straightedge, the student will construct a parallelogram.</p> <p>Students will supply reasons to two-column proofs already written.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.9.11 B</p> <p>2.4.11 A</p> <p>2.5.11 C</p> <p>2.1.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 17</p> <p>To apply theorems about parallel lines and the segment that joins the midpoint of two sides of a triangle.</p>	<p>Through exploration exercises, the student will discover properties relating parallel lines and triangles.</p> <p>Given drawings the student will solve for missing measurements.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.4.11 E</p> <p>2.1.11 A</p> <p>2.5.11 C</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 18</p> <p>To apply the definitions and identify special properties of a rectangle, rhombus and square and be able to determine when a parallelogram is a rectangle, rhombus, or square.</p>	<p>Through exploration exercises, the student will discover the properties that make a parallelogram a rectangle, rhombus, or square.</p> <p>Using a compass and straight edge, the students will construct rectangles, rhombuses, and squares.</p> <p>Given a drawing, the student will be able to determine if the quadrilateral is a rectangle, rhombus, or square and solve for missing measurements.</p> <p>Students will supply reasons to two-column proofs already written.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.9.11 C</p> <p>2.4.11 A</p> <p>2.4.11 E</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 19</p> <p>To apply the definitions and identify the properties of a trapezoid and isosceles trapezoid.</p>	<p>Through exploration exercises, the student will discover the properties about trapezoids.</p> <p>Given a drawing, the student will be able to determine if the quadrilateral is a trapezoid or an isosceles trapezoid and find missing measurements.</p> <p>Students will supply reasons to two-column proofs already written.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.9.11 C</p> <p>2.4.11 A</p> <p>2.1.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 20</p> <p>To express a in equivalent forms and solve for an unknown term in a given proportion.</p>	<p>Given a proportion, the student will use algebraic methods to solve for the missing term.</p> <p>Given a problem situation, the student will set up a proportion in order to solve the problem.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.1.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 21</p> <p>State and apply the properties of similar polygons, especially as they apply to triangles using the AA Postulate, SAS Theorem, and the SSS Theorem.</p>	<p>Through exploration, the student will discover each of the postulates/theorems.</p> <p>Given a drawing, the students will determine if two triangles can be proven similar.</p> <p>Given a drawing, the students will solve for missing measurements after proving similarity.</p> <p>Students will use the two-column proof format to prove theorems about triangles and similarity.</p> <p>Using a compass and straight edge, the student will construct similar triangles using the postulates/theorems.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.9.11 B</p> <p>2.4.11 A</p> <p>2.1.11 A</p>
<b>Resources/Materials</b>			
\			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 22</p> <p>To apply the Triangle Proportionality Theorem.</p>	<p>Given a picture, the students will solve for missing measurements.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.1.11 A</p> <p>2.5.11 C</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 23</p> <p>To determine the geometric mean between two numbers and use this concept when an altitude is drawn to the hypotenuse of a right triangle.</p>	<p>Given two numbers, the student will be able to find the geometric mean.</p> <p>Given a drawing, the students will find missing measurements.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.1.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 24</p> <p>To state and apply the Pythagorean Theorem and its converse.</p>	<p>Through exploratory activities, the students will discover the Pythagorean theorem.</p> <p>Given the measurements of the three sides of a triangle, the students will determine if it is acute, right, or obtuse.</p> <p>Given a drawing, the students will solve for missing measurements.</p> <p>The student will use the Pythagorean Theorem to solve real world problems.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.1.11 A</p> <p>2.5.11 C</p> <p>2.10.11 B</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 25</p> <p>To apply 30-60-90 and 45-45-90 triangle relationships in problem situations.</p>	<p>Through exploration, the students will discover the 30-60-90 and 45-45-90 relationships.</p> <p>Given the measurements of the two sides of a triangle, the students will determine it's third side.</p> <p>Given a drawing, the students will solve for missing measurements.</p> <p>The student will use these right triangle relationships to solve real world problems.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.1..11 A</p> <p>2.5.11 C</p> <p>2.5.11 D</p> <p>2.8.11 D</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 26</p> <p>To define and use the sine, cosine and tangent ratios.</p>	<p>Given a triangle the student will find missing angle and side measurements.</p> <p>Given real world problems, the student will use the trigonometric ratios to find solutions.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.1.11 A</p> <p>2.5.11 C</p> <p>22.10.11 B</p> <p>2.4.11 A</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 27</p> <p>To use the terms circle, sphere, center, radius, diameter, chord, secant, tangent, inscribed, and circumscribed and be able to represent them pictorially.</p>	<p>Given a drawing, the student will be able to identify all parts of a circle and sphere.</p> <p>The student will sketch pictures to represent each term or combination of terms based on given parameters.</p> <p>Given a drawing the students will solve for missing measurements.</p> <p>Using a compass and straight edge, the student will construct tangents to a circle from points on and outside the circle.</p> <p>Using a compass and straight edge, the student will construct inscribed and circumscribed polygons and circles.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.1.11 A</p> <p>2.5.11 C</p> <p>2.9.11 E</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 28</p> <p>To define and apply properties of arcs and central angles.</p>	<p>Given a drawing, students will find missing measurements.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.1.11 A</p> <p>2.5.11 A</p> <p>2.9.11 F</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 29</p> <p>To define and apply properties of inscribed angles.</p>	<p>Given a drawing, the student will solve for missing measurements.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.1.11 A</p> <p>2.5.11 A</p> <p>2.9.11 F</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 30</p> <p>To apply theorems about chords of a circle.</p>	<p>Given a drawing, the student will find missing measurements.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.1.11 A</p> <p>2.5.11 A</p> <p>2.9.11 F</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 31</p> <p>To solve problems involving angles formed by chords, secants, and tangents.</p>	<p>Given a drawing the student will solve for missing measurements.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p style="text-align: center;">2.1.11 A</p> <p style="text-align: center;">2.5.11 A</p> <p style="text-align: center;">2.9.11 F</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>OBJECTIVE 32</p> <p>To solve problems involving lengths of chords, secants segments, and tangent segments.</p>	<p>Given a drawing the student will solve for missing measurements.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p style="text-align: center;">2.1.11 A</p> <p style="text-align: center;">2.5.11 A</p> <p style="text-align: center;">2.9.11 F</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 33</p> <p>To derive and use the formulas for the area of parallelograms, triangles, trapezoids, and regular polygons.</p>	<p>Through exploration, the students will derive the area formulas for the various polygons.</p> <p>Given a drawing, the student will use the formulas to find the area of the figure.</p> <p>The student will solve real world problems involving area.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p style="text-align: center;">2.1.11 A</p> <p style="text-align: center;">2.5.11 C</p> <p style="text-align: center;">2.5.11 D</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 34</p> <p>To use the formulas for circumference and area of circles.</p>	<p>Through exploration, the students will derive the formulas for the length of an arc and the area of a sector.</p> <p>Given a drawing, the student will use the formulas to find the area of the figure.</p> <p>The student will solve real world problems involving area.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.8.11 D</p> <p>2.1.11 A</p> <p>2.5.11 C</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**GEOMETRY I**  
**Grades 10 - 12**  
**Full Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>OBJECTIVE 35</p> <p>To identify the parts of prisms, pyramids, cylinders, and cones.</p>	<p>Using drawings, the student will identify the parts of the three dimensional figures.</p> <p>The students will learn to draw the three-dimensional figures and label their parts.</p>	<p>Homework, classroom discussions, activities, quizzes, and tests</p>	<p>2.98 D</p>
<p>OBJECTIVE 36</p> <p>To find the lateral areas, total areas, and volumes of right prisms, regular pyramids, right cylinders and right cones, and to find the area and volume of spheres.</p>	<p>Through exploration, the students will discover formulas to aid in finding the areas and volumes of the figures.</p> <p>Students will use their knowledge of volume and area of three-dimensional figures to apply this knowledge to real world problems</p>		
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

