

Planned Course: Honors Geometry		Course Number: M307H		Department: Mathematics	
Unit: Congruent Triangles		Grade Level: 9-12		Date Approved: 7/15/08	
Estimated Time: 16 days		Level/Track: Honors			
PA Academic Standards	Core Concepts (in question format) • Skills/Knowledge	Activities/Strategies/Study Skills (identify some activities as remedial or enrichment activities)	Assessments (include types and topics)		

<p>ASSESSMENT ANCHORS M11.C.1.2 Recognize and/or apply properties of angles, triangles, and quadrilaterals. M11.C.1.3 Use properties of congruence, correspondence and similarity in problem-solving settings involving two- and three-dimensional Figures.</p>	<p>▶ How can you prove that two triangles are congruent and how does this lead to proving special characteristics of isosceles and equilateral triangles?</p> <ul style="list-style-type: none"> • Student will be able to apply the SSS, SAS, and ASA postulates to prove that triangles are congruent. • Student will be able to apply the AAS theorem to prove that triangles are congruent. • Student will be able to prove parts of two triangles are congruent using CPCTC. • Student will be able to apply the HL theorem to prove that right triangles are congruent. • Student will be able to apply special properties of isosceles and equilateral triangles. 	<p>▶ The student will name the corresponding parts of congruent figures.</p> <p>▶ The student will construct triangles with three pairs of sides and/or angles congruent in the form of SSS, SAS, or ASA and then verify that they are the same size and shape.</p> <p>▶ The student will prove the AAS theorem.</p> <p>▶ The student will use the definition of congruent triangles to prove corresponding parts of congruent triangles are congruent.</p> <p>▶ The student will prove the base angles theorem and its converse.</p> <p>▶ The student will prove that equilateral triangles are equiangular.</p> <p>▶ The student will analyze diagrams to apply various</p>	<p>▶ Graded homework</p> <p>▶ Classroom observation and/or participation</p> <p>▶ Quiz</p> <p>▶ Test</p>		
<p>ACADEMIC STANDARDS 2.9.11 Geometry B. Prove that two triangles or two polygons are congruent or similar using algebraic, coordinate and deductive proofs. D. Identify corresponding parts in congruent triangles to solve problems.</p>					

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	<ul style="list-style-type: none"> • Skills/Knowledge 	theorems and postulates to determine missing angles and side lengths, and prove conjectures.			