## **GEOMETRY**

Name _	 	 	 
Period			

## **Unit 05: Relationships in Triangles**

Assignment /Date	Assessment Targets	Learning Targets	Textbook Section	Practice Problems, choose to do Skills & Core OR Core & Extended	On Time	Later
#1	Triangle Inequalities	I can use the triangle inequality to determine if three lengths can construct a triangle.	5.5	□ Skills: p366/ 1-4 □ Core: p367/ 7, 9, 13, 15, 22, 24, 26 □ Extended: p368/ 29, 43, 44		
#2	Triangle Inequalities	I can use the angle side relationship of triangles to order the lengths or angles.	5.3	□ Skills: p348/ 5-7 □ Core: p348/ 14, 18, 20, 23, 30, 31, 34, 36, 41, 48 □ Extended: p350/ 46, 47		
#3	Segments in Triangles	I can use properties of a triangles median, altitude, angle bisector and perpendicular bisectors to solve problems.	5.2	Segments in Triangles Worksheet		
#4	Geometric Constructions Segments in Triangles	Geogebra Activity: Centroid Theorem  • I can use the centroid theorem to find missing lengths in medians.	5.2	□ Skills: p339/ 1-2, 16-19 □ Core: p340/ 5-10, 34, 35, 37, 44 □ Extended: p342/ 20, 41		
#5	Geometric Constructions Segments in Triangles	Geogebra Activity: Angle Bisector Theorem  • I can use the angle bisector theorem to find missing side lengths.	7.5	Angle Bisector Theorem Worksheet		
		Compass + Straightedge Activity		Link to construction animations		

#6	Segments in Triangles	I can use the method of proof by contradiction.	5.4	□ Skills: p358/ 1, 3, 4, 7 □ Core: p358/ 13, 15, 27-30 □ Extended: p360/ 34, 36	
	Geometric Constructions	• I can use tools to investigate relationships in geometric figures for example: perpendicular lines, angle bisectors, midpoints, segments, angles, altitudes and the four centers of triangles: centroid, orthocenter, circumcenter, and incenter.		Circumcenters on Geogebra Incenters on Geogebra Orthocenters on Geogebra Point of Concurrency on Geogebra Nine Point Circle (2 class days)	
#7	Review			Worksheet	

Test Date:	
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Assessment Target Grade	Unit 05 Assessment Targets
	<ul> <li>Triangle Inequalities</li> <li>I can use the triangle inequality to determine if three lengths can construct a triangle.</li> <li>I can use the angle side relationship of triangles to order the lengths or angles.</li> </ul>
	<ul> <li>Segments in Triangles</li> <li>I can use properties of a triangles median, altitude, angle bisector and perpendicular bisectors to solve problems.</li> <li>I can use the angle bisector theorem to find missing side lengths.</li> <li>I can use the centroid theorem to find missing lengths in medians.</li> <li>I can use the method of proof by contradiction.</li> </ul>
	<ul> <li>Geometric Constructions</li> <li>■ I can use tools to investigate relationships in geometric figures for example: perpendicular lines, angle bisectors, midpoints, segments, angles, altitudes and the four centers of triangles: centroid, orthocenter, circumcenter, and incenter.</li> <li>This will be assessed through completed investigations. Rubric will be provided when we start the investigations.</li> </ul>

Name													

## Timing and Effort (circle one)

Why: Learning mathematics is an incremental process and the most is gained if it is practiced frequently and regularly throughout the unit.

А	В	С	D	1
I completed all assignments on time.	I completed all assignments, most on time.	I completed at least 75% of the assigned homework problems.		I did less than half the assigned problems.

## **Understanding** (circle one)

Why: The whole point behind doing practice homework problems is to increase your understanding so that you can demonstrate a proficient level of knowledge on the unit assessment.

А	В	С	D	I
I understand the concepts well enough to apply it in unfamiliar scenarios.	I understand the concepts well enough to do most problems independently.	I can complete problems correctly when I utilize my notes.	I can complete problems correctly when I get hints along the way.	I'm confused and did not seek help.

Final Grade for Unit #5 Homework (Determined by the teacher using rubric below): A B C D I

After test is graded, consider the two grades circled above and grade(s) earned on the test

- A: At least two A's and nothing lower than a C, no more than one C.
- B: At least two B's or higher and nothing lower than a D, no more than one D.
- C: At least two C's or higher, no more than one I.
- D: At least two D's.