Course: Geometry, Text, Geometry, HRW, 2007

Standard: M:Geometry and Measurement(G&M):10:2

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines, polygons, circles, or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem, Triangle Inequality Theorem).	Makes and defends conjectures Constructs geometric arguments Uses geometric properties, or uses theorems to solve problems involving - Lines - Angles - Polygons	Secs 2-1, 2,3,4 Sec 2-5,6,7 Sec 1-1, 2 & Geometer's Sketchpad Workbook Chap 1. Sec 1-3,4 Sec 3-1,2,3,4,5 & Geometer's Sketchpad Workbook Chap 1. Sec Sec 6-1,2,3,4,5,6 & Geometer's Sketchpad Chaps 4,5	Homework completion, assessed homework, classwork, quizzes/tests, participation

Grade Level: 10
Standard:M:G&M10:2—Assessed Strands

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
	- Right triangle rations (sine, cosine, tangent)	Sec 8-1,2,3 & Geometer's Sketchpad Workbook Chap 10	Homework completion, assessed homework, classwork, quizzes/tests, participation
	Pythagorean theorem	Sec 5-7,8 & Geometer's Sketchpad Workbook Chapter 8	
	Triangle inequality Theorem	Sec 5-5,6 & Geometer's Sketchpad Workbook Chapter 3	

Course: Geometry
Standard:M:G&M10:4—Assessed Strands

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
Applies the concepts of congruency by solving problems on or off a coordinate plane involving reflections, translations, or rotations; or solves problems using congruency involving problems within mathematics or across disciplines or contexts.	- Reflection - translations, - rotations Solves problems using congruency involving problems within mathematics or across disciplines or contexts	Sec 1-5,6,7 & Geometer's Sketchpad Workbook Chapter 2 Sec 4-1 Through 4-6 & Geometer's Sketchpad Workbook Chapter 3	Homework completion, assessed homework, classwork, quizzes/tests, participation

Course: Geometry
Standard:M:G&M:10:5—Assessed Strands

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
Applies concepts of similarity by solving problems within mathematics or across disciplines or contexts.	Similarity	Sec 7-1 through 7-6 & Geometer's Sketchpad Workbook Chapter 9	Homework completion, assessed homework, classwork, quizzes/tests, participation

Course: Geometry
Standard: M:G&M:10:6-Assessed Strands

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
Solves problems involving perimeter, circumference, or area of two-dimensional figures (including composite figures) or **surface area or volume** of three-dimensional figures (including composite figures) within mathematics or across disciplines or contexts.	- perimeter - circumference - area Solves problems with three-dimensional figures(including composite figures) involving: - surface are - volume	Sec 9-1,2,3 & Geometer's Sketchpad Workbook Chapter 7 Sec 10-1 through 10-8. Dome Construction	Homework completion, assessed homework, classwork, quizzes/tests, participation

Course: Geometry
Standard:M:G&M:10:7-Assessed Strands

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
Uses units of measure appropriately and consistently when solving problems across content strands; makes conversions within or across systems and makes decisions concerning an appropriate degree of accuracy in problem situations involving measurement in other GSEs.	Uses units of measure appropriately and consistently when solving problems across content strands - Makes conversions within or across systems - Makes decisions concerning an appropriate degree of accuracy in problem situations involving measurement across the curriculum	Chapters 9,10 and Dome Construction Chapter 7, 8, 10	Homework completion, assessed homework, classwork, quizzes/tests, participation

Course: Geometry
Standard:M:G&M:10:9-Assessed Strands

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
Solves problems on and off the coordinate plane involving distance, midpoint, perpendicular and parallel lines, or slope.	- distance - midpoint -perpendicular and parallel lines - slope.	Sec 1-5,6,7 Sec 3,2,3,4,5,6 Geometer's Sketchpad Workbook Chapter 1	Homework completion, assessed homework, classwork, quizzes/tests, participation

Course: Geometry
Standard:M:G&M:HS-2-Not Assessed

Knowledge & Skills	Content	Activities Resousrces & Materials	Assessments
Creates formal proofs of propositions (e.g., angles, lines, circles, distance, midpoint and polygons including triangle congruence and similarity).		Section 2-5,6,7	Homework completion, assessed homework, classwork, quizzes/tests, participation

Course: Geometry
Standard:M:G&M:HS-4-Not Assessed

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
Applies the concepts of congruency by using matrices to represent reflections, translations, and rotations.	Concept of contruency using matricies	Teacher created lesson	Homework completion, assessed homework, classwork, quizzes/tests, participation

Course: Geometry

Standard: MG&M: HS-5

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
Applies concepts of similarity to define the trigonometric functions as ratios of sides of right triangles; **uses the ratios of the sides of special right triangles** ($30^\circ - 60^\circ - 90^\circ$ and $45^\circ - 45^\circ - 90^\circ$) to determine the sine, cosine and tangent of 30°, 45°, and 60° ; and solves related problems.	Similarity as ratios of sides of right triangles Special right triangles	Section 5-7,8	Homework completion, assessed homework, classwork, quizzes/tests, participation

Course: Geometry
Standard:MG&M:HS-6-Not Assessed

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
Applies trigonometric formulas (e.g., Law of Sines, Law of Cosines, $A = \frac{1}{2}ab\sin C$) to find angles, lengths and areas of polygons.	Law of sines Law of cosines	Sec 8-4,5	Homework completion, assessed homework, classwork, quizzes/tests, participation

Course: Geometry
Standard:MG&M:10-7-Not Assessed

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
Applies informal concepts of successive approximation, upper and lower bounds, and limits in measurement situations (e.g., use successive approximation to find the area of a pond); and **uses measurement conversion strategies** (e.g., unit/dimensional analysis).	Successive approximation Concept of upper and lower bounds Overview of concept of limit	Teacher created lesson	Homework completion, assessed homework, classwork, quizzes/tests, participation

Course: Geometry
Standard:MG&M:HS-10-Not Assessed

Knowledge & Skills	Content	Activities Resources & Materials	Assessments
Demonstrates conceptual understanding of spatial reasoning and visualization by sketching or using dynamic geometric software to generate three-dimensional objects from two-dimensional perspectives, or to generate two-dimensional perspectives from three-dimensional objects, and by solving related problems; perform and justify constructions with a compass and straightedge or dynamic geometric software.	Two to three dimensional and vice versa	This strand may be achieved through a project-based approach. This would be a teacher created activity	Homework completion, assessed homework, classwork, quizzes/tests, participation