MEA 2014-2015

Teacher: Claudia Valle

Start Date:

Course: Geometry B

Student:

Projected End Date:

Unit 1: Similarity

Objective: Students will understand how to recognize similar polygons.

Assignment #	Activity	Essential Question	Date Completed	Grade	TEKS	ELPS
1	Ratio and Proportions				G.5.B, G.11.D	1.A, 1C, 1E, 3C,
2	Ratios in Similar Polygons				G.5.B, G.11.A, G.11.B	1.A, 1C, 1E, 3C, 3D, 3F, 3G, 4J
3	Triangle Similarity: AA, SSS, and SAS				G.5.B, G.9.B, G.11.A, G.11.B, G.11.D	1.A, 1C, 1E, 3C, 3D, 3F, 3G, 4J, 5F, 5G
4	Applying Properties of Similar Triangles	What is the relationship between the perimeters and areas of similar polygons?			G.2.A	1.A, 1C, 1E, 3C, 3D, 3F, 3G, 4J
5	Using Proportional Relationships	How can you decide if two triangles are similar?			G.1.B, G.11.A, G.11.B, G.11.D	1.A, 1C, 1E, 3C, 3D, 3F, 3G, 4J
6	Dilations and Similarity in the Coordinate Plane				G.9.B, G.11.A	1.A, 1C, 1E, 3C, 3D, 3F, 3G, 4J
7	Unit 1 Test				G.1.B, G.2.A, G.3.B, G.5.B, G.9.B, G.11.A, G.11.B, G.11.D	1E, 4K

Unit 2: Right Triangles and Trigonometry

Objective: Students will understand how to use various methods to solve real life problems involving right triangle.

Assignment #	Activity	Essential Question	Date Completed	Grade	TEKS	ELPS
8	Similarity in Right Triangles				G.5.B, G.5.D, G.7.A, G.8.C, G.11.A, G.11.B, G.11.C	1C, 3D, 3J, 5G
9	Trigonometric Ratios	How can you use similar triangles and their applicable theorems to solve real life problems?			G.5.D, G.7.A, G.8.C, G.11.B, G.11.C	1C, 3D, 3J, 5G
10	Solving Right Triangles				G.5.D, G.11.C	1C, 3D, 3J, 5G
11	Angles of Elevation and Depression	What are some methods for solving right triangles based on their angles?			G.5.D, G.11.C	1C, 3D, 3J, 5G
12	Law of Sines and Law of Cosines				G.5.B, G.5.D, G.7.A, G.11.A, G.11.C	1C, 3D, 3J, 5G
13	Vectors				G.1.B, G.7.A, G.11.C	1C, 3D, 3J, 5G
14	Unit 2 Test				G.1.B, G.5.B, G.5.D, G.7.A, G.8.C, G.11.A, G.11.B, G.11.C	1E, 4K

Unit 3: Perimeter, Circumference, and Area

Objective: Students will understand how to recognize and find the perimeter, circumference, and areas of different polygons.

Assignment #	Activity	Essential Question	Date Completed	Grade	TEKS	ELPS
15	Formulas for Triangles and Quadrilaterals				G.3.C, G.3.E, G.5.A, G.8.C	1C, 1E, 5F
16	Formulas for Circles, and Regular Polygons				G.5.A, G.8.A, G.8.C, G.11.D	1C, 1E, 5F
17	Composite Figures	How can you find the area of regular polygons?			G.8.A	1C, 1E, 5F
18	Perimeter and Area in the Coordinate Plane	How can you find areas of real-life regions containing circles, parts of circles or other polygons?			G.7.A, G.7.B, G.8.A	1C, 1E, 5F
19	Effects of Changing Dimensions Proportionally				G.5.A, G.5.B, G.11.D	1C, 1E, 5F
20	Geometric Probability	How can you estimate the likelihood that an event will occur?			G.8.A	1C, 1E, 5F
21	Unit 3 Test				G.3.C, G.3.E, G.5.A, G.5.B, G.7.A, G.7.B, G.8.A, G.8.C, G.11.D	1E, 4K

Unit 4: Solid Geometry

Objective: Students will understand how to use and apply the surface area and volume formulas for various solids.

Assignment #	Activity	Essential Question	Date Completed	Grade	TEKS	ELPS
22	Solid Geometry				G.6.A, G.6.B, G.9.D	1.A, 1C, 1E, 2D, 2E, 2I, 3C, 3D, 3F, 3G, 4F
23	Representations of Three-Dimensional Figures				G.6.C, G.9.D	1.A, 1C, 1E, 2D, 2E, 2I, 3C, 3D, 3F, 3G, 4F
24	Formulas in Three Dimensions				G.6.A, G.7.C, G.9.D	1.A, 1C, 1E, 2D, 2E, 2I, 3C, 3D, 3F, 3G, 4F
25	Surface Area of Prisms and Cylinders				G.6.B, G.8.D, G.11.D	1.A, 1C, 1E, 2D, 2E, 2I, 3C, 3D, 3F, 3G, 4F
26	Surface Area of Pyramids and Cones	What is the difference between a prism and a pyramid?			G.6.B, G.8.D, G.11.D	1.A, 1C, 1E, 2D, 2E, 2I, 3C, 3D, 3F, 3G, 4F
27	Volume of Prisms and Cylinders	What are some real-life examples of where you would need to find the volume of a figure?			G.6.B, G.8.D, G.11.D	1.A, 1C, 1E, 2D, 2E, 2I, 3C, 3D, 3F, 3G, 4F
28	Volume of Pyramids and Cones				G.8.D, G.11.D	1.A, 1C, 1E, 2D, 2E, 2I, 3C, 3D, 3F, 3G, 4F
29	Spheres				G.8.D, G.11.D	1.A, 1C, 1E, 2D, 2E, 2I, 3C, 3D, 3F, 3G, 4F
30	Unit 4 Test				G.6.A, G.6.B, G.6.C, G.7.C, G.8.D, G.9.D, G.11.D	1E, 4K

Unit 5: Circles

Objective: Students will understand how to identify the parts of a circle.

Assignment #	Activity	Essential Question	Date Completed	Grade	TEKS	ELPS
31	Lines that Intersect Circles				G.1.A, G.2.A, G.2.B, G.9.C	1C, 1E, 2D, 5G
32	Arcs and Chords				G.1.A, G.2.A, G.2.B, G.8.C, G.9.C	1C, 1E, 2D, 5G
33	Sector Area and Arc Length	What is the difference between central angles and inscribed angles?			G.1.A, G.1.B, G.8.B, G.9.C	1C, 1E, 2D, 5G
34	Inscribed Angles				G.1.A, G.2A, G.2.B, G.5.B, G.9.C	1C, 1E, 2D, 5G
35	Angle Relationships in Circles	How can you use angles formed by segments and/or lines intersecting circles to solve problems?			G.1.A, G.2.A, G.5.A, G.5.B, G.9.C	1C, 1E, 2D, 5G
36	Segment Relationships in Circles	What are the components for the equation of a circle?			G.1.A, G.2.B, G.5.A	1C, 1E, 2D, 5G
37	Circles in the Coordinate Plane				G.1.A, G.2.B, G.5.A	1C, 1E, 2D, 5G
38	Unit 5 Test				G.1.A, G.1.B, G.2.A, G.2.B, G.5.A, G.5.B, G.8.B, G.8.C, G.9.C	1E, 4K

Unit 6: Transformational Geometry

Objective: Students will understand how execute various types of transformations.

Assignment #	Activity	Essential Question	Date Completed	Grade	TEKS	ELPS
39	Reflections				G.2.A, G.2.B, G.7.A, G.10.A	1C, 2E, 3D, 4F, 5F
40	Translations				G.2.A, G.2.B, G.7.A, G.10.A	1C, 2E, 3D, 4F, 5F
41	Rotations	What is a transformation, and what are the 3 basic types of transformations?			G.2.A, G.2.B, G.7.A, G.10.A	1C, 2E, 3D, 4F, 5F
42	Compositions of Transformations				G.5.C, G.10.A	1C, 2E, 3D, 4F, 5F
43	Symmetry	How can vectors be used to describe translations?			G.2.B, G.5.C, G.10.A	1C, 2E, 3D, 4F, 5F
44	Tessellations				G.5.C	1C, 2E, 3D, 4F, 5F
45	Dilations	How can a figure be transformed multiple times?			G.2.A, 11.A, G.11.B, G.11.D	1C, 2E, 3D, 4F, 5F
46	Unit 6 Test				G.2.A, G.2.B, G.5.C, G.7.A, G.10.A, G.11.A, G.11.B, G.11.D	1E, 4K