*1 Day Pacing = 45 min. Session

Module 1: Transforming Geometric Objects

Topic 3: Line and Angle Relationships

Lesson #	Lesson Title	Lesson Subtitle	Highlights	TEKS	Pacing*
ELPS: 1.A, 1.C, 1.E, 1.F, 1.G, 2.C, 2.E, 2.I, 3.D, 3.E, 4.B, 4.C, 5.B, 5.F, 5.G					
1	Seeing it From a Different Angle	Special Angle Relationships	Students explore the types of angles formed when two lines intersect. They learn the definitions of *complementary angles, supplementary angles, perpendicular* lines, *adjacent angles, linear pairs* of angles, and *vertical angles*. Throughout the lesson, students use patty paper to illustrate the special angle pairs and any special relationships between the measures of angle pairs. At the end of the lesson, students have a vocabulary study guide of patty paper. Students use these definitions to answer questions and then write and solve equations involving special angle pairs.	7.11C	2
2	Pulling a One-Eighty!	Triangle Sum and Exterior Angle Theorems	Students explore and justify the relationships between angles and sides in a triangle. They establish the Triangle Sum Theorem and use the theorem as they explore the relationship between interior angle measures and the side lengths of triangles. Students identify exterior angles and remote interior angles of triangles and explore the relationship between these angles to establish the Exterior Angle Theorem. They then practice applying both theorems to demonstrate their knowledge of triangle relationships.	7.11C 8.8D	2

Lesson #	Lesson Title	Lesson Subtitle	Highlights	TEKS	Pacing*
3	Crisscrossed Applesauce	Angle Relationships Formed by Lines Intersected by a Transversal	Students explore the angles formed when two lines are intersected by a transversal. They use the Parallel Postulate and transformations to begin exploring and identifying the angles. The terms *transversal*, *alternate interior angles*, *alternate exterior angles*, *same-side interior angles*, and *same-side exterior angles* are introduced. Students are given a street map and asked to identify transversals and special pairs of angles. After measuring several angles, they conclude that when two parallel lines are intersected by a transversal the alternate interior, alternate exterior, and corresponding angles are congruent. Students also conclude that same-side interior and same-side exterior angles are supplementary. When the lines are not parallel, these relationships do not hold true. Finally, students solve problems using the parallel line and angle relationships.	8.8D	2
4	The Vanishing Point	The Angle-Angle Similarity Theorem	The Angle-Angle Similarity Theorem can be used to show that two triangles are similar. From previous lessons, students should already recognize that two similar triangles have congruent corresponding angles and proportional corresponding sides. The Angle-Angle Similarity Theorem allows students to show that two triangles are similar without comparing the measures of the six parts of each triangle.	8.8D	1
End of Topic Assessment					1