Mathematics
Topics in Algebra and Geometry
Unit 6: Angles and Angle Relationships

Essential Understandings	▪ Angles are an essential part of geometry. ▪ Properties of algebra can be applies in geometry.
Essential Questions	▪ What are vertical angles? ▪ What are complimentary angles? ▪ What are supplementary angles? ▪ What are perpendicular angles? ▪ What theorems involve perpendicular lines>
Essential Knowledge	▪ Vertical pairs of angles are congruent. ▪ Vertical angles are formed by two intersecting lines. ▪ Two angles whose measures have a sum of 90 degrees are complementary angles. ▪ Two angles whose measures have a sum of 180 degrees are supplementary. ▪ Perpendicular lines intersect at right angles.
Vocabulary	▪ Terms: ○ vertical angles, complementary angles, supplementary angles, congruent, perpendicular lines
Essential Skills	▪ Find the measure of an angle from other known angle measures. ▪ Deduce which pairs of angles are congruent, vertical, complementary, or supplementary. ▪ Deduce which pairs of lines are perpendicular.
Related Maine Learning Results	Mathematics C. Geometry Geometric Figures C1.Students justify statements about polygons and solve problems. a. Use the properties of triangles to prove theorems about figures and relationships among figures. b. Solve for missing dimensions based on congruence and similarity. c. Use the Pythagorean Theorem in situations where right triangles are created by adding segments to figures. d. Use the distance formula.
Sample Lessons And Activities	▪ Students will work in pairs to complete a worksheet that explores angles and their measures.
Sample Classroom Assessment Methods	▪ Students will share the results of their worksheets with the class.

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Sample Resources	▪ Publications: ○ Geometry, Jurgensen, Brown, Jurgensen (McDougal-Littell) ○ Geometry: Concepts and Skills, Larson, Boswell, Stiff (McDougal-Littell)