

Lesson 5 Assessment

Solving Problems Involving Angle Properties

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<p>Uses angle properties to determine the sum of the interior angles of polygons</p> <p>I can decompose a polygon into triangles, then multiply the number of triangles by 180° to determine the sum of the interior angles.</p>	<p>Identifies the relationship between the number of triangles that compose a polygon and the number of sides</p> <p>There is a pattern: sum of the interior angles increases by 180° for each additional side. The sum of the interior angles of n-sided polygons equals $(n - 2) \times 180^\circ$.</p>	<p>Uses the sum of the interior angles formula to determine the sum of the angles in a polygon</p> <p>Determine the sum of the interior angles of a heptagon.</p> <p>Use the formula with $n = 7$.</p> <p>Sum of interior angles $= (7 - 2) \times 180^\circ$ $= 900^\circ$</p>	<p>Uses the sum of the interior angles of n-sided polygons to solve problems</p> <p>Determine the measure of the interior angle of a regular nonagon (9-sided polygon).</p> <p>Sum of interior angles $= (9 - 2) \times 180^\circ$ $= 1260^\circ$</p> <p>$1260^\circ \div 9 = 140^\circ$</p>
Observations/Documentation			