

Unit 5: Properties of Triangles

~November 12-November 22

Standards:

- G.5 The student, given information concerning the lengths of sides and/or measures of angles in triangles, will solve problems, including practical problems. This will include
- ordering the sides by length, given angle measures;
 - ordering the angles by degree measure, given side lengths;
 - determining whether a triangle exists; and
 - determining the range in which the length of the third side must lie.
- G.10 The student will solve problems, including practical problems, involving angles of convex polygons. This will include determining the
- sum of the interior and/or exterior angles;
 - measure of an interior and/or exterior angle; and
 - number of sides of a regular polygon.

Topic	I can...	Resources
Classifying Triangles and Triangle Basics	<ul style="list-style-type: none"> ✓ classify triangles according to angles and sides. ✓ find missing angle measures of a triangle using the Triangle Sum Theorem and the Triangle Exterior Angle Theorem. 	<p>From Khan Academy</p> <p>https://www.khanacademy.org/math/basic-geo/basic-geometry-shapes/triangle-angles/v/proof-sum-of-measures-of-angles-in-a-triangle-are-180</p>
Ordering Sides and Angles & Possible Side Lengths	<ul style="list-style-type: none"> ✓ order the lengths of the sides of a triangle when given the measures of its angles. ✓ order the measures of the angles of a triangle when given the lengths of its sides. ✓ determine whether a triangle can be formed given the length of three segments. ✓ given the lengths of two sides of a triangle, find the range in which the third side will lie. 	<p>https://www.khanacademy.org/math/basic-geo/basic-geometry-shapes/triangle-angles/v/ordering-triangle-sides-and-angles</p> <p>https://www.khanacademy.org/math/geometry/hs-geo-foundations/hs-geo-polygons/v/sum-of-interior-angles-of-a-polygon</p>
The Polygon Angle Sum Theorem	<ul style="list-style-type: none"> ✓ find the sum and individual angle measures of a polygon depending on the number of sides the polygon has. 	<p>https://www.khanacademy.org/math/geometry/hs-geo-foundations/hs-geo-polygons/v/sum-of-the-exterior-angles-of-convex-polygon</p> <p>From Math Open Ref</p> <p>https://www.mathopenref.com/polygoncentralangle.html</p>

		<p>https://www.mathopenref.com/polygoncentralangle.html</p> <p>https://www.mathopenref.com/polygonexteriorangles.html</p> <p>https://www.mathopenref.com/polygonanglerelation.html</p> <p>Sample Assessment/ Review with Solutions Sample Assessment 19-20 (002).pdf Unit 5 Sample Assessment Solutions.pdf</p>
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