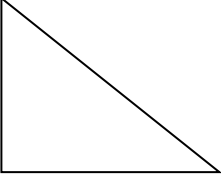
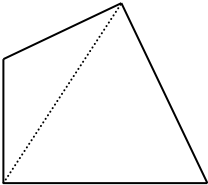
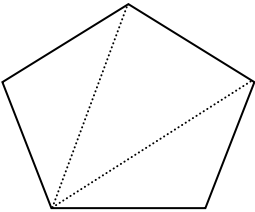
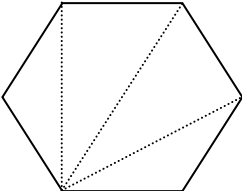
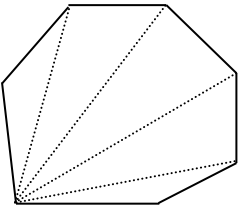
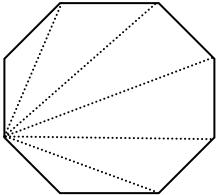


Polygon Interior Angle Sum

Name: _____ Date: _____ Per: _____

Students find and use the measures of interior angles of triangles and polygons

Polygon	Number of Sides	Number of Triangles Formed	Sum of degrees in all triangles	Re-write sum of degrees as $x \bullet 180^\circ$
				
				
				
				
				
				

Use the results of the investigation to answer the following questions.

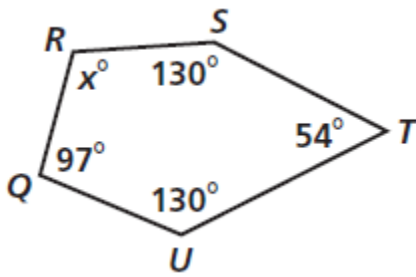
1) What do you notice about the pattern of the number of sides (column 2) and the number of triangles that are formed (column 3)?

2) How is the number of sides that the polygon has (column 2) related to the sum of the degrees of all triangles formed when written as $x \cdot 180^\circ$ (column 5)?

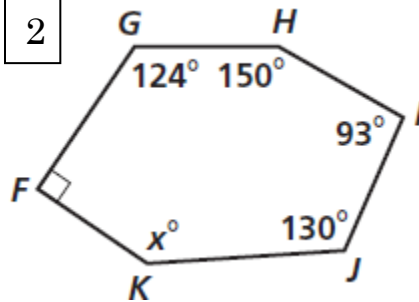
3) Write the discovery of question #2 as a formula. Use the variable n to represent the number of sides that the polygon has.

4) What is the name of this formula? _____

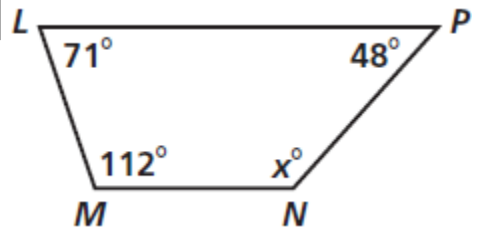
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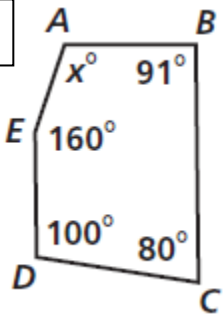
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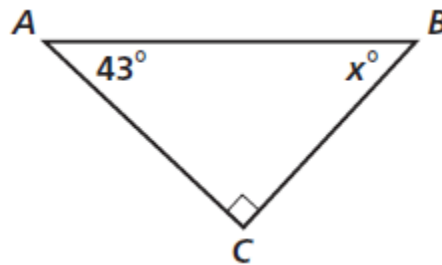
3



4



5



6

