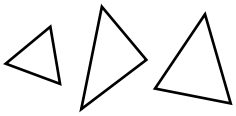
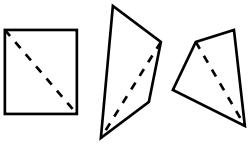
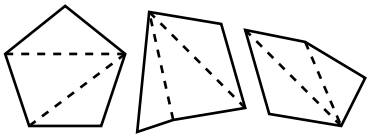
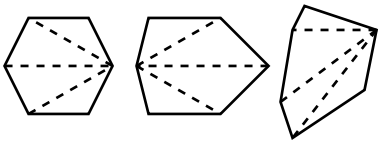
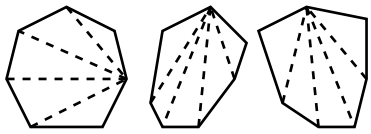
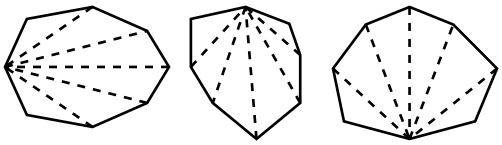
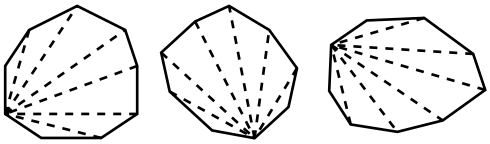
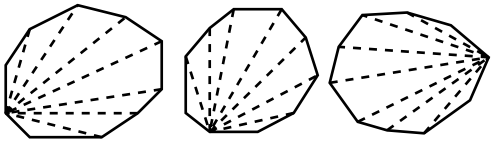
MathFLIX CHALLENGE

Sum of Interior Angles

The sum of the interior angles in any triangle is *always* 180º. You can use this fact to find the sum of the interior angles of any polygon. Complete the table below.

polygon	samples	# of sides	# of triangles	# of Δ × 180º	sum of interior angles
triangle		3	1	1 × 180	180
quadrilateral		4	2	2 × ___	
pentagon		5			
hexagon					
heptagon					
octagon					
nonagon					
decagon					

You can use the formula (# sides - 2) * 180 to find the sum of the interior angles of *any* polygon. Explain why.