
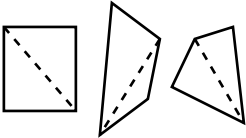
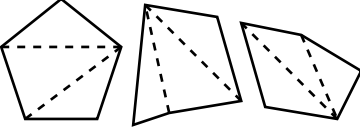
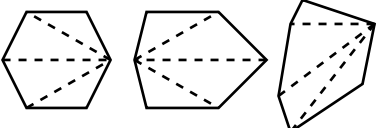
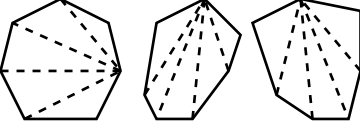
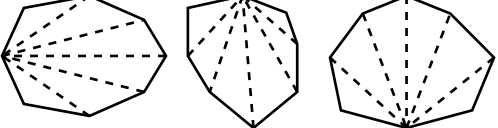
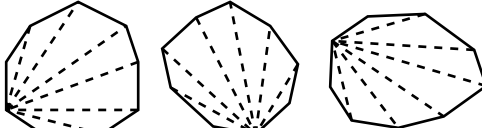
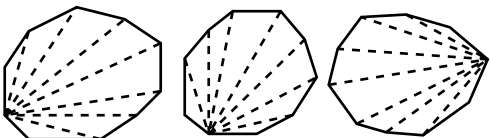


COUNTDOWN CHALLENGE

Sum of Interior Angles

The sum of the interior angles in any triangle is *always* 180° . 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 $\Delta \times 180^\circ$	sum of interior angles
triangle		3	1	1×180	180
quadrilateral		4	2	$2 \times \underline{\quad}$	
pentagon		5			
hexagon					
heptagon					
octagon					
nonagon					
decagon					

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