

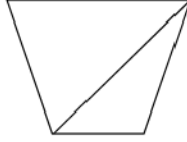
Study the examples and then fill in the blanks.

Triangle



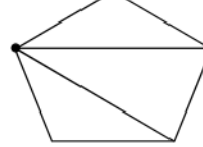
1 triangle
Sum is 180°

Quadrilateral



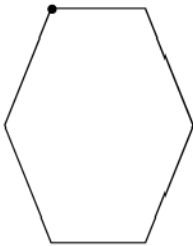
2 triangles
Sum is $2(180^\circ) = \underline{\hspace{1cm}}$

Pentagon

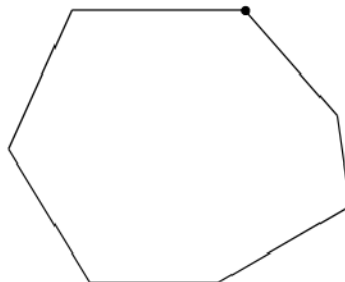


3 triangles
Sum is $3(180^\circ) = \underline{\hspace{1cm}}$

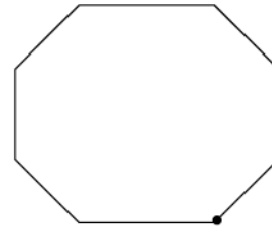
Now below are polygons of 6, 7, and 8 sides. Divide each of them into triangles by drawing all possible diagonals from the indicated vertex, as shown above for the pentagon. Then fill in the blanks and find the sum of the interior angles for each polygon.



 triangles
Sum is °



 triangles
Sum is °



 triangles
Sum is °

Complete the chart.

Name	Number of sides	Number of triangles	Sum of interior angles
	3		
	4		
	5		
	6		
	7		
	8		
	n		