

Geometry

In the previous theorem, we found the sum of all the interior angles inside any convex polygon.

If a convex polygon was *regular* (all the angles and sides are the same), then what would each angle be?

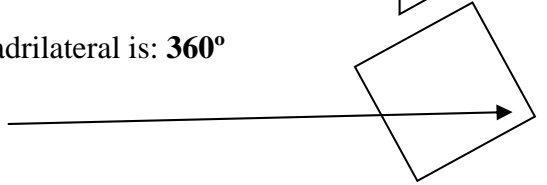
For example, the sum of the measures of the interior angles of a triangle is: **180°**

If the triangle is regular, then each angle would be: _____



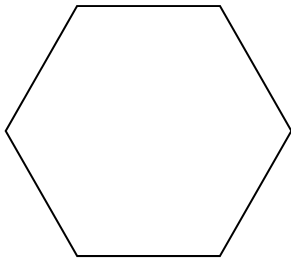
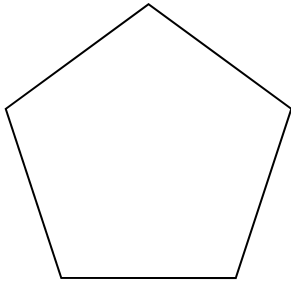
Next example, the sum of the measures of the interior angles of a quadrilateral is: **360°**

If the quadrilateral is regular, then each angle would be: _____



Corollary to Theorem 6.1: The measure of an interior angle of a *regular* convex n-gon is:

Exterior angles:



Polygon	# of sides	Sum of exterior angles	Exterior angle measures of regular polygon
	3		
	4		
	5		
	6		
	7		
	8		
	9		
	10		
	n-gon		

Theorem 6.2: The sum of the measures of a *regular* convex n-gon is:

Corollary to Theorem 6.2: The measure of an exterior angle of a *regular* convex n-gon is: