

Name: _____
 Interior/Exterior angles of polygons

Date: _____

Complete the table for angle measures (each polygon is regular)

Polygon (# of sides)	Sum of interior	Each interior	Sum of exterior	Each exterior
Pentagon				
Heptagon				
	2520			
		160		
36-gon				
	1440			
		90		
				30
		162		

Word Problems:

- The sum of the measures of eight interior angles of a convex nonagon is 1190. Find the measure of the ninth angle.
- The sum of the measures of seven exterior angles of a convex octagon is 339. Find the measure of the eighth angle.
- The measure of the exterior angles of a convex quadrilateral are X , $2X$, $3X$, and $4X$. Find the value of X and the measure of each exterior angle.
- The measure of each exterior angle of a regular decagon is $X + 10$. Find X and the measure of each exterior angle.

