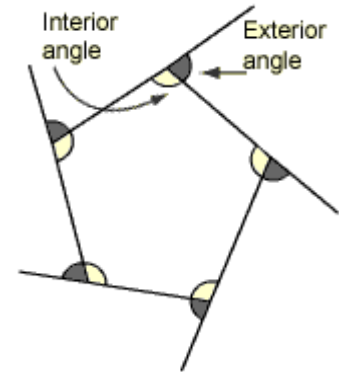


Important Polygon Results

<u>Interior Angles</u>	<u>Exterior Angles</u>
sum = $(n-2)180$ (in any polygon)	sum = 360 (in any polygon)
each = $\frac{(n-2)180}{n}$ (in a regular polygon)	each = $\frac{360}{n}$ (in a regular polygon)



Sample Problems

- 1.) Find the sum of the measures of the interior angles in a 576-gon.
- 2.) The sum of the measures of the interior angles of a polygon is 1500° . How many sides does it have?
- 3.) Each interior angle of a regular polygon measures 172° ; how many sides does it have?
- 4.) Find the measure of each interior angle of a regular 27-gon.

- 5.) The sum of the measures of the interior angles of a polygon is $164,160^\circ$. How many sides does this polygon have?
- 6.) The measure of each exterior angle involving a regular polygon is 4° . How many sides does this polygon have?
- 7.) Find the sum of the measures of the exterior angles of a 271-gon.
- 8.) The measure of each interior angle involving A regular polygon is 164° . How many sides does this polygon have?
- 9.) A regular polygon has the property that the measure of each of its exterior angles is 170 degrees less than the measure of each of its interior angles. How many sides does this polygon have?
- 10.) A regular polygon has the property that the measure of each of its exterior angles is 100 degrees less than the measure of each of its interior angles. How many sides does this polygon have?