

Name: _____

Chapter 6: Polygons & Quadrilaterals

Date: _____ Period: _____

Homework 6.1 A: Angles of Polygons

Sum of Interior angles: $S = (n - 2)(180)$

EACH interior angle of a REGULAR polygon:

$$\frac{(n - 2)(180)}{n}$$

Sum of Exterior angles: $S = 360$

EACH exterior angle of a REGULAR polygon:

$$\frac{360}{n}$$

1. What is the **sum** of the measures of the **interior** angles of an octagon?

2. What is the **sum** of the measures of the **interior** angles of a 25-gon?

3. What is the measure of **each** interior angle of a **regular** hexagon?

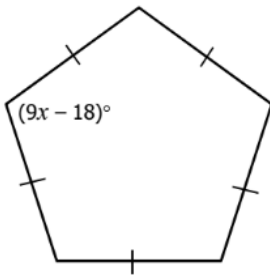
4. What is the **sum** of the measures of the **exterior** angles of a decagon?

5. What is the measure of **each exterior** angle of a **regular** 30-gon?

6. If the exterior angle of a **regular** polygon is 22.5° , how many sides does it have?

7. The measure of the seven angles in a nonagon measure 138° , 154° , 145° , 132° , 128° , 147° , and 130° . If the two remaining angles are equal in measure, what is the measure of each angle?

8. Find the value of x .



9. Find the $m\angle V$.

