

6.1 Assignment

1. Explain how you can determine how many triangles are within any polygon. Use complete sentences and you may give an example if you'd like to help explain your reasoning.

2. What is the sum of the interior angles of a polygon?

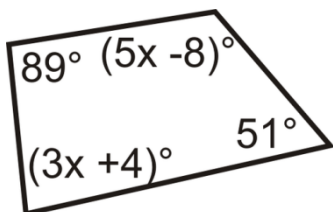
- a. 180° b. 360° c. $(n-2)180^\circ$ d. $180^\circ(n)$

3. What is the sum of the exterior angles of a polygon?

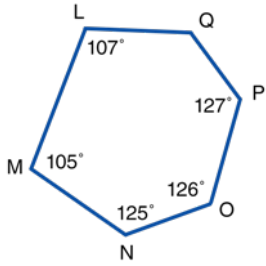
4. You are given a polygon that has 36 sides. What is the sum of the interior angles?

5. You are told that one of the angles in your regular polygon is 162° . How many sides does this polygon have?

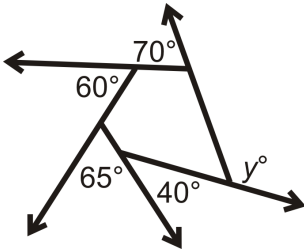
6. Find the value of x.



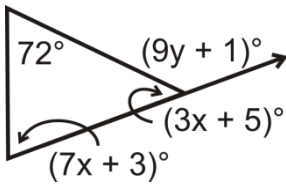
7. Find the $m\angle Q$.



8. Find the value of y .



9. Find the values of x and y .



10. You are given a regular hexagon. Determine the measure of one exterior angle and the measure of one interior angle.

11. Find the value of x and y .

