

# Geometry

## 7.1 Angles of Polygons

Polygon

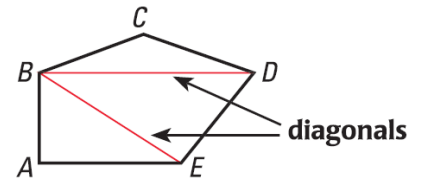
- \_\_\_\_\_ figure made of \_\_\_\_\_ segments

Diagonal

- Segment that joins \_\_\_\_\_

All polygons can be \_\_\_\_\_ into \_\_\_\_\_

- The sum of the angles of a triangle is \_\_\_\_\_
- For the \_\_\_\_\_, multiply that by \_\_\_\_\_



### Polygon Interior Angles Theorem

Sum of the \_\_\_\_\_ of the \_\_\_\_\_ angles of a \_\_\_\_\_ is \_\_\_\_\_

\_\_\_\_\_

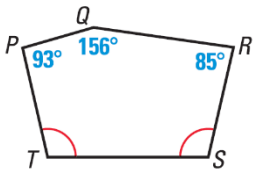
Sum of the \_\_\_\_\_ of the \_\_\_\_\_ angles of a \_\_\_\_\_ is \_\_\_\_\_

The coin is a regular 11-gon. Find the sum of the measures of the interior angles.



The sum of the measures of the interior angles of a convex polygon is  $1440^\circ$ . Classify the polygon by the number of sides.

Find  $m\angle T$



Geometry 7.1

Equilateral Polygon

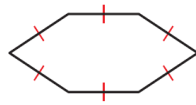
- All \_\_\_\_\_ congruent

Equiangular Polygon

- All \_\_\_\_\_ congruent

Regular Polygon

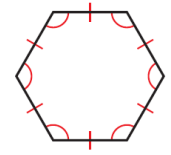
- All \_\_\_\_\_ and \_\_\_\_\_ congruent



\_\_\_\_\_



\_\_\_\_\_



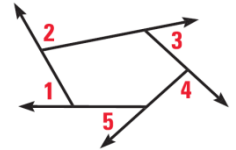
\_\_\_\_\_

Name: \_\_\_\_\_

**Polygon Exterior Angles Theorem**

Sum of the \_\_\_\_\_ of the \_\_\_\_\_ angles of a \_\_\_\_\_ polygon is \_\_\_\_\_

What is the measure of an exterior angle of a regular pentagon?



What is the measure of an interior angle of a regular pentagon?

Assignment: 352 #1, 4, 6, 8, 10, 12, 14, 18, 22, 24, 25, 30, 32, 34, 36, 50, 51, 52, 56, 61 = 20 total