

Name _____ Period _____ Date _____

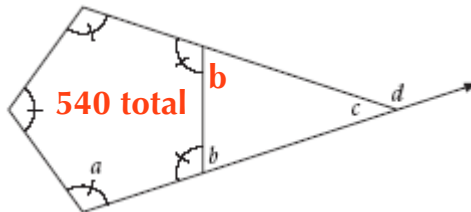
Complete each statement.

- The sum of the measures of the n interior angles of an n -gon is $(n-2)*180$.
- The number of triangles formed in a decagon when all the diagonals from one vertex are drawn is **8 (Remember that $(n-2)$ represents the number of triangles)**
- The sum of the measures of the exterior angles of a 25-gon is $360/25 \sim 14.4$.
- The measure of one angle in a regular octagon is $\frac{180*(8-2) = 1080 \text{ total \# of degrees, divide by 8 angles}}{\text{angle measure} = 135}$
- If the measure of one exterior angle of a regular polygon is 24° , then the polygon has _____ sides.

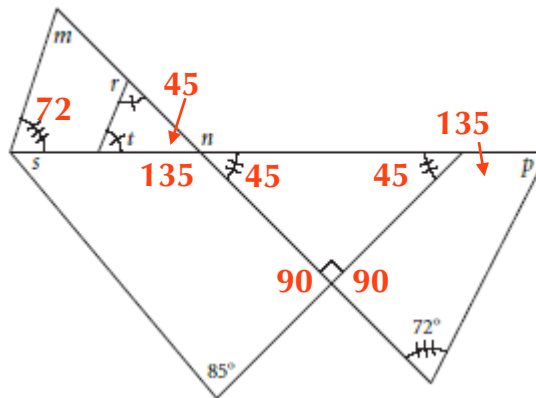
Find each lettered angle measure.

$360/24 = 15 \text{ sides}$

- 6.
- $a = \underline{108}$
 $b = \underline{72}$
 $c = \underline{36}$
 $d = \underline{144}$

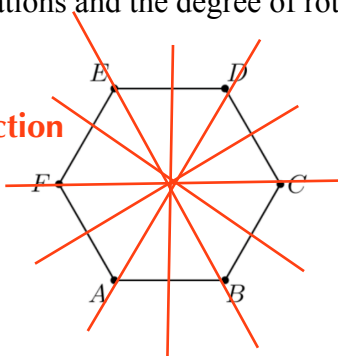


- 7.
- $m = \underline{153}$
 $n = \underline{135}$
 $p = \underline{63}$
 $r = \underline{112.5}$
 $s = \underline{50}$
 $t = \underline{67.5}$



8. For the following two figures, draw all the lines of reflection that will carry it onto itself. Then, describe the number of rotations and the degree of rotation that will carry it onto itself.

6 lines of reflection
6 rotations
60 degrees



5 lines of reflection
5 rotations
72 degrees

