

Pop Quiz

Get out a scrap sheet of paper.

1. Write the equation for finding the *Sum of the Interior Angles of a Polygon*.
2. Write the equation for finding the *Sum of the Exterior Angles of a Polygon*.
3. Write the equation for finding an *Interior Angle of a Regular Polygon*.

In Exercises 24 and 25, find the value of n for each regular n -gon described.

24. Each interior angle of the regular n -gon has a measure of 175.2° .

$$A. \frac{180(n-2)}{n} = 175.2 \cdot n$$

$$180(n-2) = 175.2n$$

$$\begin{array}{r} 180n - 360 = 175.2n \\ -180n \qquad -180.0n \end{array}$$

$$\begin{array}{r} -360 = -4.8n \\ \hline -4.8 \qquad -4.8 \end{array}$$

$$n = 75$$

25. Each exterior angle of the regular n -gon has a measure of 3° .

$$A. \frac{360}{n} = 3 \cdot n$$

$$360 = 3n$$

$$n = 120$$

Homework Assignment
Worksheet 11.1B