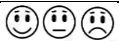


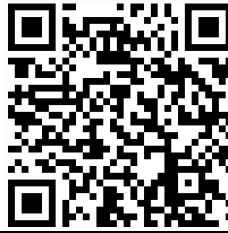
Name : _____

Date: _____



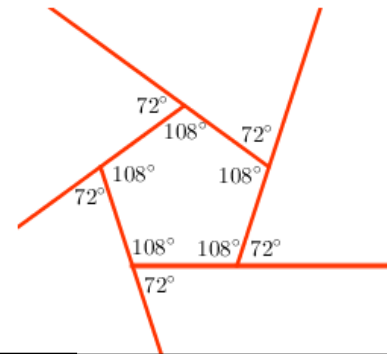
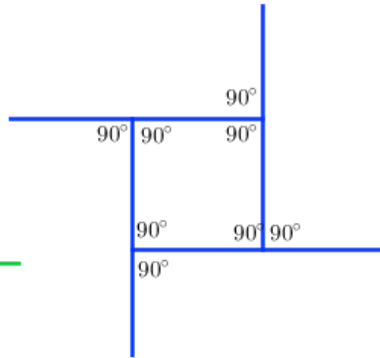
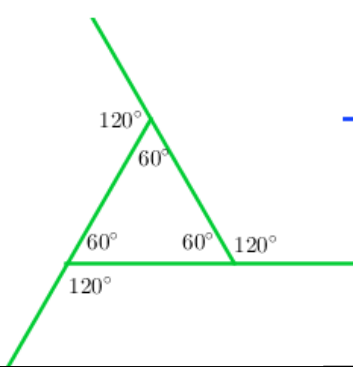
SOL G.10: The student will solve real-world problems involving angles of polygons.

G.10 Notes:



Exterior Angles of a Polygon:		Interior Angles of a Polygon:	
Sum = 360°	1 ext. $\angle = \frac{360^\circ}{\# \text{ of angles}}$ *Only for regular polygons*	Sum = $180^\circ(n - 2)$ n = # of sides	1 int. $\angle = \frac{\text{Interior Sum}}{\# \text{ of angles}}$ *Only for regular polygons*

Examples:

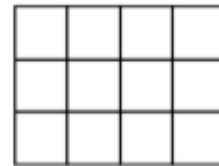
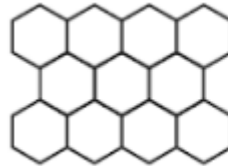


Sum of ext, angles = _____	Sum of ext, angles = _____	Sum of ext, angles = _____
1 ext. angle = _____ =	1 ext. angle = _____ =	1 ext. angle = _____ =
Sum of int. angles = _____ =	Sum of int. angles = _____ =	Sum of int. angles = _____ =
1 int. angle = _____ =	1 int. angle = _____ =	1 int. angle = _____ =

Tessellations:

The sum around any single point is _____.

Therefore, the **sum of angles** around any point in a tessellation is _____.



G.10 Practice:



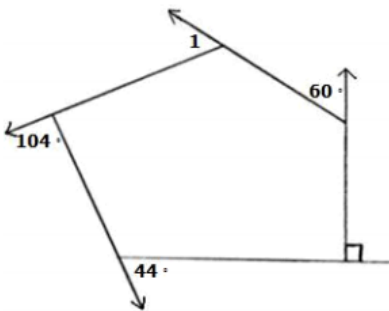
What is the measure of an interior angle of a decagon?

The sum of interior angles of a polygon is 1440° . How many sides does the shape have?

What is the measure of an exterior angle of a polygon with 12 sides?

In a regular polygon each exterior angle has a measure of 45° . How many sides does the shape have?

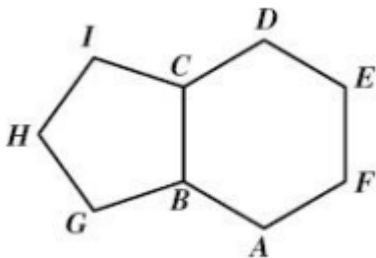
What is the measure of $\angle 1$?



An exterior angle is shown in the picture. How many sides does the polygon have?



Both the pentagon and the hexagon are **regular** polygons. What is the $m\angle ICD$?



Rectangular flowerbeds are built on each side of a fish pond that is in the shape of a regular octagon. What is the value of x ?

