

1.  
Find the measure of an exterior angle of each of the following equiangular polygons:

a. A triangle

e. A 23-gon

2.  
Find the measure of an angle of each of the following equiangular polygons:

a. A pentagon

e. A 21-gon

3.  
Find the number of sides an equiangular polygon has if each of its exterior angles is

a.  $60^\circ$

e.  $7.5^\circ$

4.  
Find the number of sides an equiangular polygon has if each of its angles is

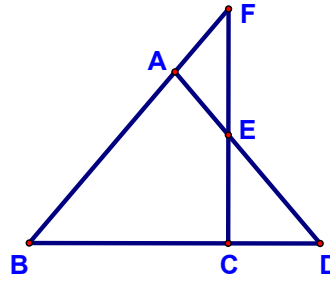
a.  $144^\circ$

e.  $172\frac{4}{5}^\circ$

9.

Given:  $\overline{AB} \cong \overline{AD}$   
 $\overline{FC} \perp \overline{BD}$

Prove:  $\triangle AEF$  is isos



Statements

Reasons

10.

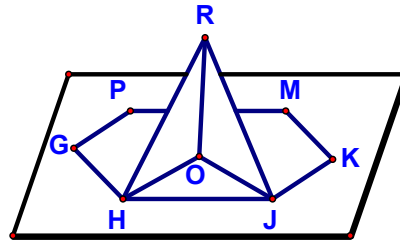
The sum of the measures of the angles of a regular polygon is  $5040^\circ$ . Find the measure of each angle.

11.

The sum of a polygon's angle measures is nine times the measure of an exterior angle of a regular hexagon. What is the polygon's name?

15.

Given:  $\overline{RO} \perp$  plane GHJ  
 O, M, & K are coplanar  
 GHJKMP is reg. hexagon  
 $\overrightarrow{HO}$  bisects  $\angle GHJ$   
 $\overline{RH} \cong \overline{RJ}$



Prove:  $\triangle HOJ$  is regular

Statements

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