

Geometry

11.5 Areas of Regular Polygons (11.3)

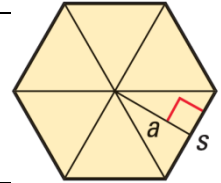
Apothem

- A segment drawn from the _____ of a regular polygon _____ to the _____ (also bisects edge)

Area of a Regular Polygon

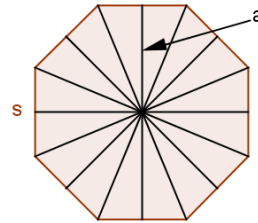
$A =$ _____

Where P is the _____ and a is the _____

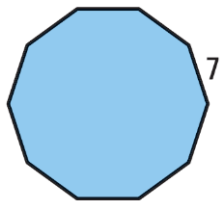
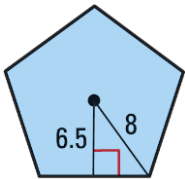


Typical steps to find area of regular polygon

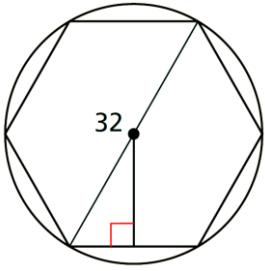
1. Find $\frac{1}{2}$ of _____ angle
 $\frac{1}{2} \left(\frac{360}{n} \right)$
2. Use trigonometry to find _____
 tan, sin, cos
3. $A = \frac{1}{2} Pa$



Find the area of the regular polygon.



A regular hexagon is inscribed in a circle with a diameter of 32 units. Find the area of the hexagon.



Assignment: 600 #6, 8, 10, 12, 13, 18, 20, 22, 24, 26, 27, 28, 53, 54, 55, 57, 63 = 17 total