

Name: \_\_\_\_\_

Hour: \_\_\_\_\_

### **Area of Regular Polygons- Given a Side Length HW**

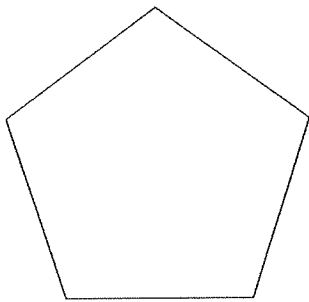
Directions: Find the area of the regular polygon. Show all work. Round to the nearest tenth if needed.

1. Find the area of a **regular nonagon** with perimeter of 90cm.

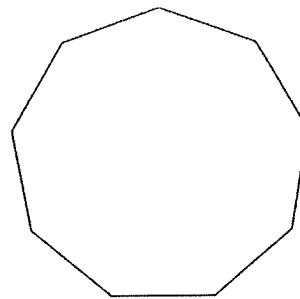
2. Find the area of a **regular dodecagon** with perimeter of 120m.

3. Find the area of a **regular triangle** with perimeter of 21 km.

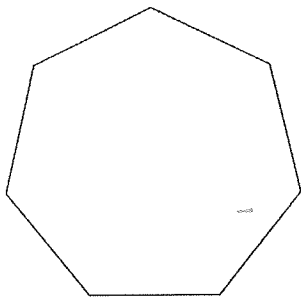
3.  $s = 12\text{m}$



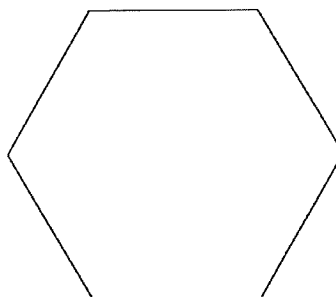
4.  $S = 15\text{ ft}$



5.  $s = 21\text{km}$

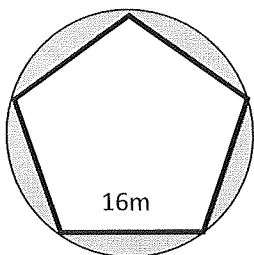


6.  $S = 2\text{m}$

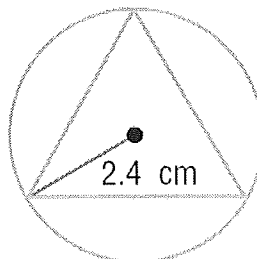


Directions: Find the area of the shaded region. Show all work.

7.



8.



### Spiral: Using Apothem and Radius

Directions: Find the area of the regular pentagon given the information provided.

9.  $AP = 5.6\text{ cm}$

10.  $UT = 12\text{m}$

