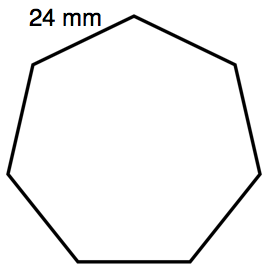
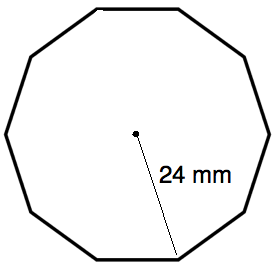
Finding Area or Regular Polygons Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(other than ∆’s, Squares and Hexagons)

**Find the area given a side length.**

1. How many sides does the polygon have?
2. Determine an interior angle measure.
3. Sketch in two consecutive radii from the center C to form a central ∆.
4. Determine all angle measures of this triangle.
5. Draw the apothem inside this triangle.
6. What right triangles do you have?
7. Use trigonometry ratios to determine the length of the apothem.
8. Calculate the area.

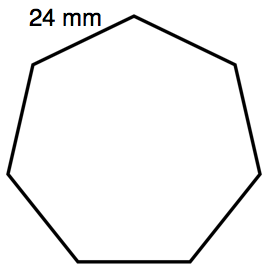
**Find the area given a radius**

****

1. How many sides does the polygon have?
2. Determine an interior angle measure.
3. Sketch in two consecutive radii from the center C to form a central ∆.
4. Determine all angle measures of this triangle.
5. Draw the apothem inside this triangle.
6. What right triangles do you have?
7. Use trigonometry ratios to determine the length of the apothem.
8. Calculate the area.

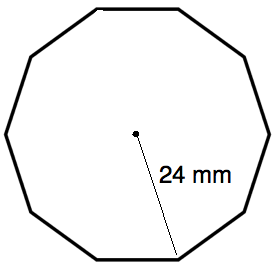
Finding Area or Regular Polygons Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(other than ∆’s, Squares and Hexagons)

**Find the area given a side length.**

1. How many sides does the polygon have?
2. Determine an interior angle measure.
3. Sketch in two consecutive radii from the center C to form a central ∆.
4. Determine all angle measures of this triangle.
5. Draw the apothem inside this triangle.
6. What right triangles do you have?
7. Use trigonometry ratios to determine the length of the apothem.
8. Calculate the area.

**Find the area given a radius**

****

1. How many sides does the polygon have?
2. Determine an interior angle measure.
3. Sketch in two consecutive radii from the center C to form a central ∆.
4. Determine all angle measures of this triangle.
5. Draw the apothem inside this triangle.
6. What right triangles do you have?
7. Use trigonometry ratios to determine the length of the apothem.
8. Calculate the area.