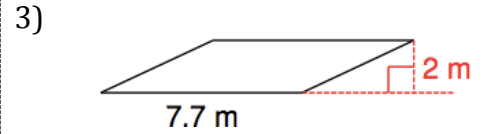
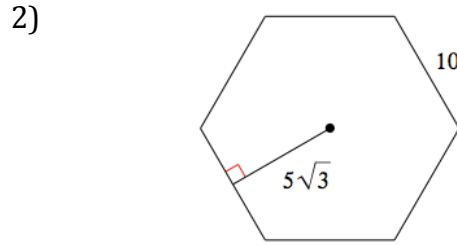
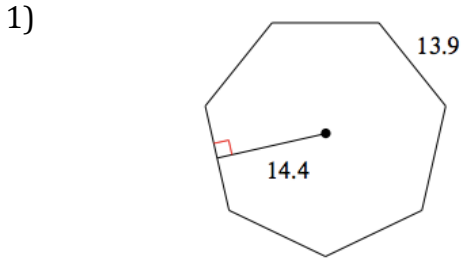


LEVEL: EMERGING

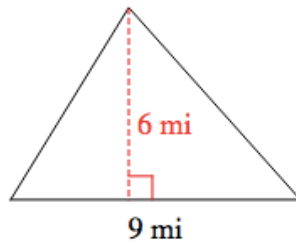
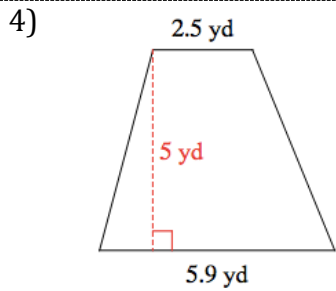
Directions: Find the area of the polygon. If necessary, round answers to the nearest thousandth.



Area = _____

Area = _____

Area = _____



6) The area of a kite is 16 in^2 .
 $d_1 = x + 1$
 $d_2 = x + 5$
 Find x

Area = _____

Area = _____

$x =$ _____

LEVEL: PROFICIENT

Directions: Find the area of the given diagram.



Area = _____

Directions: Find the area of the following regular polygons given the description. If necessary, round answers to the nearest thousandth.

8) A regular triangle with a side length of 10 in.

Area = _____

9) A regular hexagon with a radius of 8 cm.

Area = _____

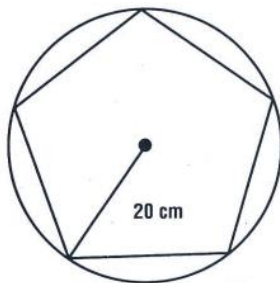
10) A regular dodecagon (12 sides) with an apothem of 19.5 in.

Area = _____

LEVEL: MASTERY

Directions: Find the indicated area of each inscribed polygon. If necessary, round answers to the nearest thousandth.

11) Area outside the polygon but inside the circle.



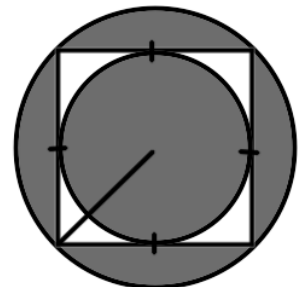
Area = _____

12) Area outside the polygon but inside the circle.



Area = _____

13) The shaded regions if the radius of the large circle is 12 in.



Area = _____