

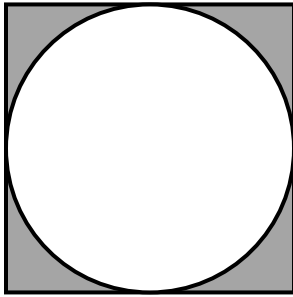
Section 10.2 – Finding the Area of Irregular Shapes or the Shaded Region

**Big Idea:** Think of shaded region problems as if you are working with cookie dough. You are usually cutting one or more shapes out of another bigger shape and you are trying to determine how much dough is left over.

**Ex 1:**

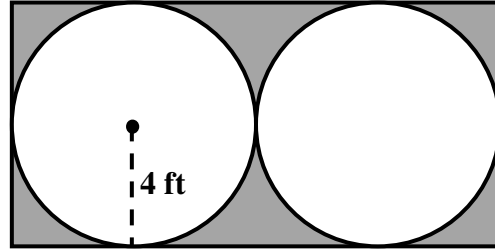
Find the area of the shaded region. If possible, leave answers in terms of  $\pi$ .

a)

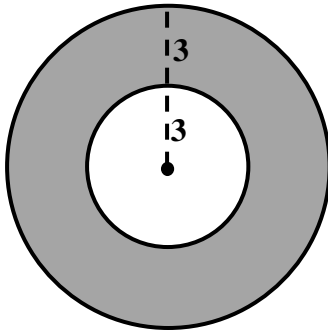


10 in.

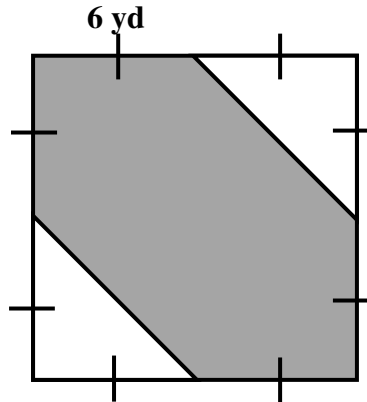
b)



c)



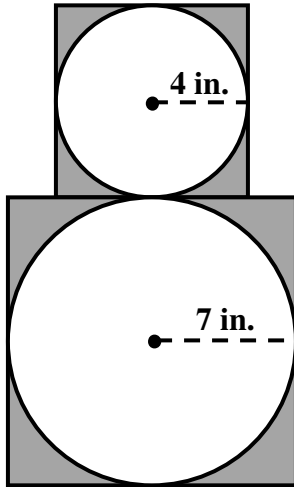
d)



**Ex 2:**

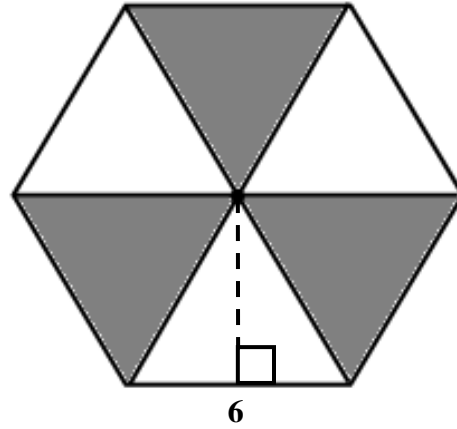
Find the area of the shaded region. If possible, leave answers in terms  $\pi$  or in radical form.

a)



b) The figure below is a regular hexagon.

A regular hexagon can be divided into six regular triangles.



c)

