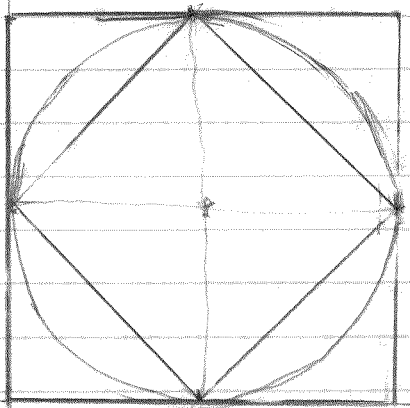


1.1
4

4 cont. Before the class that we discussed this problem, I had only briefly looked at the problem but I didn't really know where to start when I looked at it again I drew this picture



First I started with the circumscribed square. The length of each side is equal to the diameter of the circle so $l = 2r$. The area of this square is $4r^2$.

Next I went to the smaller inscribed square. By splitting the larger square into four parts it is easy to see that the area of the inscribed square is half of the circumscribed square. So the area is $2r^2$.

So to find the halfway point you would add the two areas and divide by 2
So $\frac{4r^2 + 2r^2}{2} = \frac{6r^2}{2} = 3r^2$.

Since the actual area is πr^2 it would take the value of 3 if this was true and accurate.