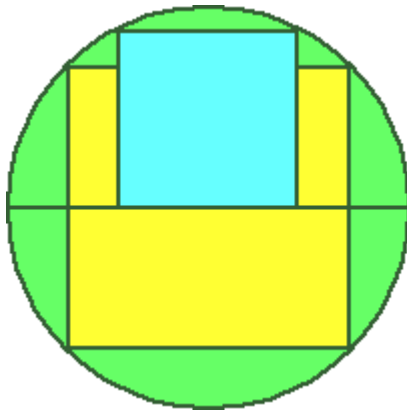


In the diagram below, the blue square is inscribed in the semicircle, and the yellow square is inscribed in the circle.



The blue square has an area of  $40\text{cm}^2$ .

**Can you find the area of the yellow square?**