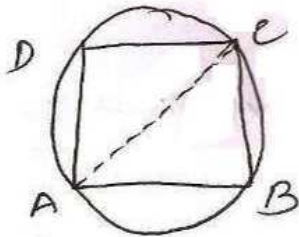


area uncovered by tiles

$$\begin{aligned}
 &= ar(\text{rect}) - ar(80 \text{ tiles}) \\
 &= lb - 80 \times \pi r^2 \\
 &= 500 \times 400 - 80 \times 3.14 \times 25^2 \\
 &= 200000 - 157000 \\
 &= 43000 \text{ cm}^2 \\
 &= 4.3 \text{ m}^2
 \end{aligned}$$

(12)



$$\begin{aligned}
 \text{area of } \odot &= 1256 \text{ cm}^2 \\
 \pi r^2 &= 1256 \\
 3.14 r^2 &= 1256 \\
 \Rightarrow r &= \sqrt{400} \\
 &= 20 \text{ cm}
 \end{aligned}$$

Since A rhombus inscribed in a circle is a square
 \therefore rhombus ABCD is a square

Diagonal of square = diameter of circle

$$\begin{aligned}
 d &= 2 \times 20 \\
 &= 40 \text{ cm}
 \end{aligned}$$

$$\begin{aligned}
 \text{area of square} &= \frac{1}{2} d^2 \\
 &= \frac{1}{2} \times 40 \times 40 \\
 &= 800 \text{ cm}^2
 \end{aligned}$$