

October 3rd

A square of side length 8cm is inscribed in a circle.

Find the area of the circle.

The diameter of the circle is the diagonal of the square so is $\sqrt{8^2 + 8^2} = 8\sqrt{2}$

Hence radius of the circle = $4\sqrt{2}$

$$\text{Area} = \pi \times (4\sqrt{2})^2 = \mathbf{32\pi \text{ cm}^2}$$