

A circle has area $A = 0.25 \text{ cm}^2$. What is its radius?

Solution: Since area A and radius r of a circle are related by

$$A = \pi r^2$$

we know that

$$r = \sqrt{\frac{A}{\pi}}$$

Using the value of area provided:

$$\begin{aligned} r &= \sqrt{\frac{0.25}{3.1416}} \\ &= 0.28 \text{ cm.} \end{aligned}$$