1. A circle has area A = 0.25 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:

   $$r = \sqrt{\frac{0.25}{3.1416}}$$
   $$= 0.28 \text{ cm.}$$