

We have 280 cm of mettal wire. So, the length of our the circumference is  $C = 280\text{cm}$ .

Using formula  $C = 2\pi R$  we can find the radius  $R$ :  $R = \frac{C}{2\pi} = \frac{280\text{cm}}{6.28} = 44.6\text{cm}$

If we have radius we can find the area  $S$  using formula:  $S = \pi R^2 = 3.14 \cdot 44.6^2\text{cm}^2 = 6246\text{cm}^2$