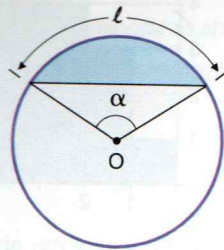
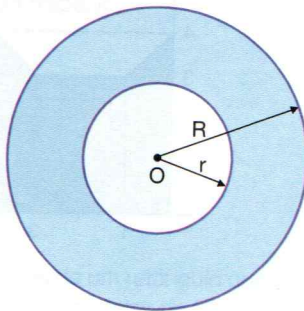


Segmento circular



$$A = \frac{R^2}{2}(\alpha - \text{sen } \alpha) \quad (\alpha \text{ em radianos})$$

Coroa circular

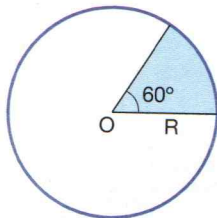


$$A = \pi R^2 - \pi r^2$$

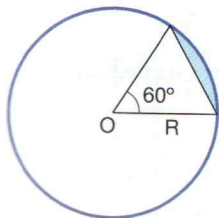
EXERCÍCIOS RESOLVIDOS

4. Dado um círculo de raio R , calcule a área do setor circular e do segmento circular do ângulo central de 60° .

Solução:



$$A = \frac{R^2 \alpha}{2} = \frac{R^2 \cdot \frac{\pi}{3}}{2} = \frac{R^2 \pi}{6}$$



$$\begin{aligned} A &= \frac{R^2}{2}(\alpha - \text{sen } \alpha) = \frac{R^2}{2} \left(\frac{\pi}{3} - \text{sen } \frac{\pi}{3} \right) = \frac{R^2}{2} \left(\frac{\pi}{3} - \frac{\sqrt{3}}{2} \right) = \\ &= \frac{R^2}{12} (2\pi - 3\sqrt{3}) \end{aligned}$$