$$l = 2 \,.\, sen\, \alpha \,.\, r$$

$$A_o = A_{\square}$$

$$\pi r^2 = l^2$$

$$\pi r^2 = (2 \,.\, sen\, \alpha \,.\, r)^2$$

$$\pi r^2 = 4 \,.\, (sen\, \alpha)^2\, r^2$$

$$(sen\, \alpha)^2 = \frac{\pi}{4}$$

$$sen\, \alpha = \frac{\sqrt{\pi}}{2}$$

$$l = 2 \,.\, \frac{\sqrt{\pi}}{2} \,.\, r$$

$$l = \sqrt{\pi} \,.\, r$$