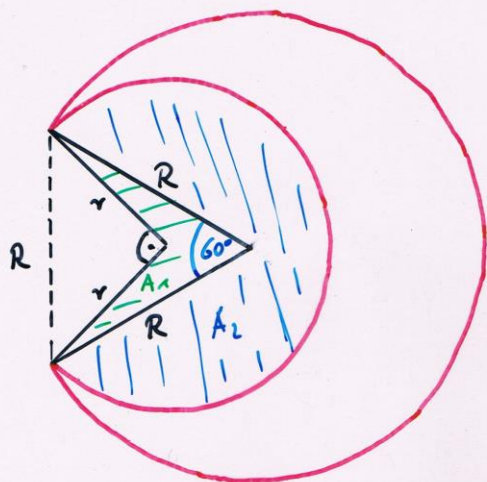


S. 16/25a



$$R = \sqrt{3} \cdot r$$

$$\begin{aligned} U &= \frac{300}{360} \cdot 2\pi R + \frac{3}{4} \cdot 2\pi r = \\ &= \frac{5}{6} \cdot 2\pi \cdot \sqrt{3} r + \frac{3}{2} \pi r = \\ &= \left( \frac{5}{3} \cdot \sqrt{3} + \frac{3}{2} \right) \pi \cdot r \approx 12,1 r \end{aligned}$$

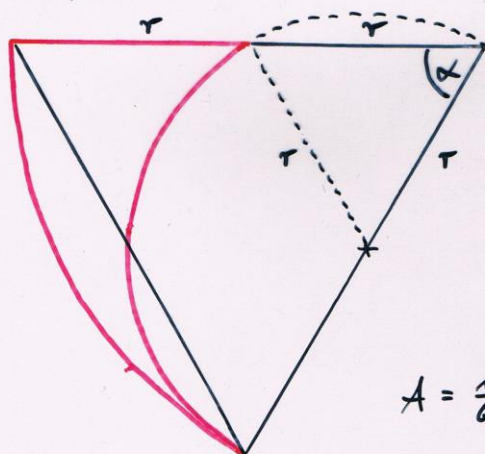
$$A = \frac{5}{6} R^2 \pi - A_2 = \frac{5}{6} \cdot 2r^2 \pi - A_2$$

$$A_2 = \frac{3}{4} r^2 \pi - A_1$$

$$A_1 = \frac{1}{2} \cdot R \cdot \frac{\sqrt{3}}{2} R - \frac{1}{2} r^2 = \frac{\sqrt{3}}{2} r^2 - \frac{1}{2} r^2$$

$$\begin{aligned} A &= \frac{5}{3} r^2 \pi - \frac{3}{4} r^2 \pi + \frac{\sqrt{3}}{2} r^2 - \frac{1}{2} r^2 = \\ &= \frac{20}{12} \pi r^2 - \frac{9}{12} r^2 \pi + \frac{\sqrt{3}}{2} r^2 - \frac{1}{2} r^2 = \left( \frac{11}{12} \pi + \frac{\sqrt{3}}{2} - \frac{1}{2} \right) r^2 \approx 3,25 r^2 \end{aligned}$$

S. 16/25b,



$$R = 2r ; \alpha = 60^\circ$$

$$U = r + \frac{1}{6} \cdot 2\pi \cdot (2r) + \frac{2}{6} \cdot 2\pi \cdot r$$

$$U = r + \frac{2\pi}{3} r + \frac{2\pi}{3} r$$

$$U = \left( 1 + \frac{4\pi}{3} \right) r \approx 5,19 r$$

$$A = \frac{1}{6} \cdot (2r)^2 \pi - \frac{1}{2} \cdot r \cdot \frac{\sqrt{3}}{2} r - \frac{2}{6} r^2 \pi$$

$$A = \frac{2}{3} r^2 \pi - \frac{\sqrt{3}}{4} r^2 - \frac{1}{3} r^2 \pi$$

$$A = \frac{\pi}{3} r^2 - \frac{\sqrt{3}}{4} r^2 = \left( \frac{\pi}{3} - \frac{\sqrt{3}}{4} \right) r^2 \approx 0,614 r^2$$