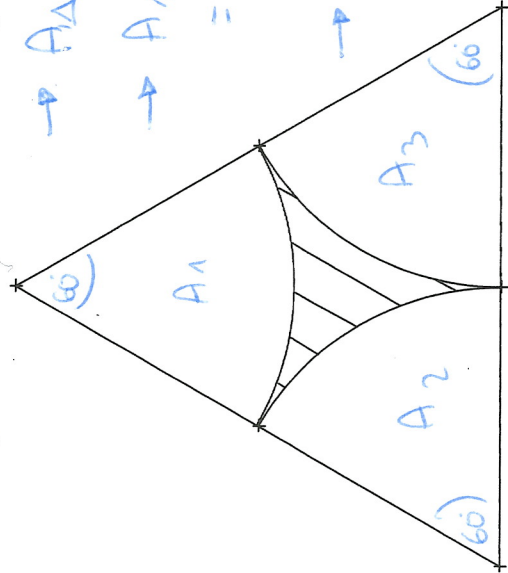


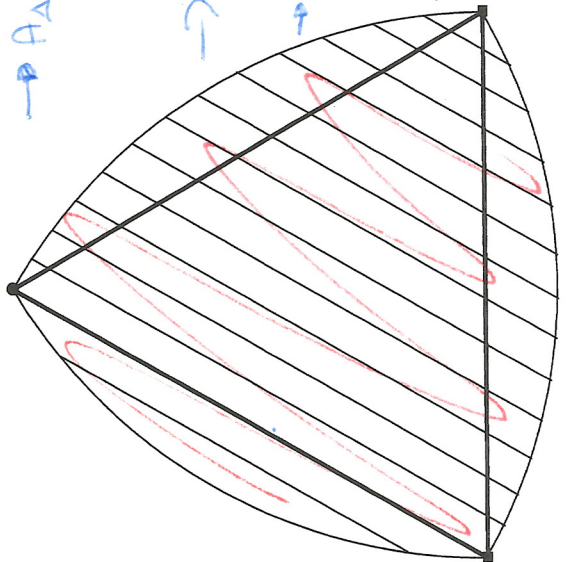
Berechne die schraffierten Teile.

1. Gleichseitiges Dreieck mit der Seitenlänge s



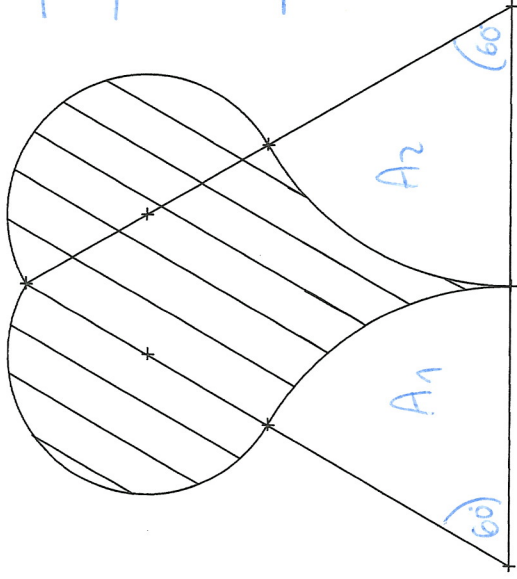
$$\begin{aligned} \rightarrow A_{\Delta} &= \frac{s^2}{4} \cdot \sqrt{3} \\ \rightarrow A_1 + A_2 + A_3 &= A_{\text{Halbkreis}} \\ &= \frac{\pi \cdot (\frac{s}{2})^2}{2} = \frac{s^2 \cdot \pi}{8} \\ \rightarrow A_{III} &= A_{\Delta} - A_{\text{Halbkreis}} \\ &= \frac{s^2 \sqrt{3}}{4} - \frac{s^2 \cdot \pi}{8} \\ &\approx s^2 \cdot 0,1403 \end{aligned}$$

3.



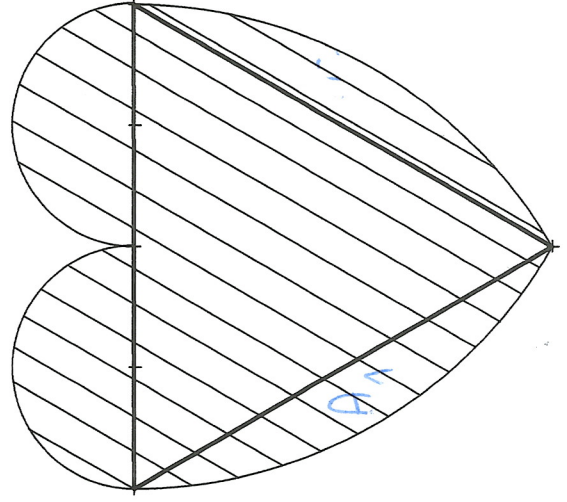
$$\begin{aligned} \rightarrow A_{\Delta} &= \frac{s^2}{4} \cdot \sqrt{3} \\ \rightarrow &= \frac{\pi \cdot s^2}{2} - \frac{\pi \cdot s^2}{2} \\ &= \frac{\pi \cdot s^2}{2} - 2 \cdot \frac{s^2}{4} \sqrt{3} \\ &\approx s^2 \cdot 0,70477 \end{aligned}$$

2.



$$\begin{aligned} \rightarrow A_{\Delta} &= \frac{s^2}{4} \cdot \sqrt{3} \\ \rightarrow A_1 + A_2 &= \pi \cdot \left(\frac{s}{2}\right)^2 \\ &= \frac{s^2 \cdot \pi}{4} \\ \rightarrow A_{III} &= A_{\Delta} - (A_1 + A_2) \\ &= \frac{s^2 \sqrt{3}}{4} - \frac{s^2 \cdot \pi}{4} + \frac{s^2 \pi}{16} \\ &\approx s^2 \cdot 0,36756 \end{aligned}$$

4.



$$\begin{aligned} \rightarrow A_{\Delta} &= \frac{s^2}{4} \cdot \sqrt{3} \\ \rightarrow A_1 &= \frac{\pi \cdot s^2}{6} - \frac{s^2}{4} \sqrt{3} \\ \rightarrow A_{III} &= A_{\Delta} + A_1 + \frac{\pi \cdot s^2}{16} \\ &\approx s^2 \cdot 0,8105 \end{aligned}$$