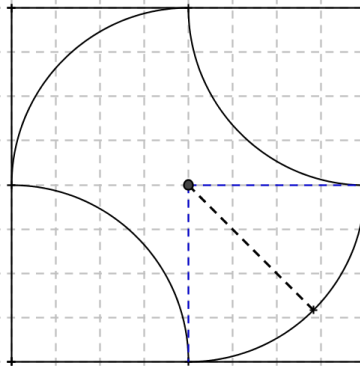


190/3e
 $a = 4\text{cm}$

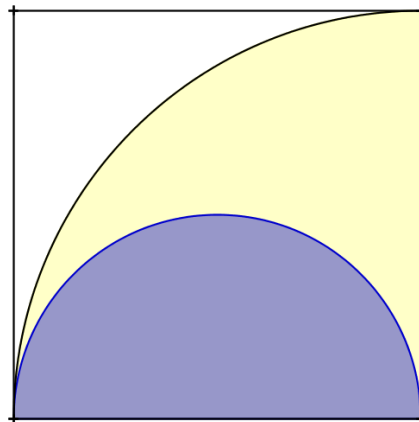


$$A_{\text{gelb}} = A_{\text{Quadrat}} - 2 \cdot A_{\text{Sektor}} - 2 \cdot (A_{\text{Quadrat}_{\text{klein}}} - A_{\text{Sektor}_{\text{klein}}})$$

$$A_{\text{gelb}} = [4^2 - 2 \cdot \frac{1}{4} \cdot 2^2 \cdot \pi - 2 \cdot (2^2 - \frac{1}{4} \cdot 2^2 \cdot \pi)] \text{cm}^2$$

$$A_{\text{gelb}} = 8 \text{cm}^2$$

190/3b
 $a = 4\text{cm}$

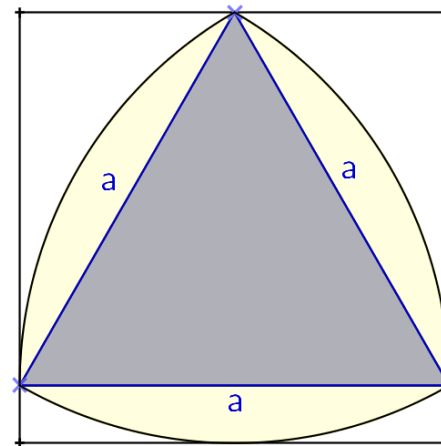


$$A_{\text{gelb}} = A_{\text{Viertelkreis}} - A_{\text{Halbkreis}_{\text{blau}}}$$

$$A_{\text{gelb}} = (0,25 \cdot 4^2 \cdot \pi - 0,5 \cdot 2^2 \cdot \pi) \text{cm}^2$$

$$A_{\text{gelb}} = 6,28 \text{cm}^2$$

190/3c
 $a = 4\text{cm}$



$$A_{\text{gelb}} = 3 \cdot (A_{\text{Sektor}} - A_{\text{Dreieck}_{\text{blau}}})$$

$$A_{\text{gelb}} = 3 \cdot \left(\frac{60^\circ}{360^\circ} \cdot 4^2 \cdot \pi - \frac{4^2}{4} \cdot \sqrt{3} \right) \text{cm}^2$$

$$A_{\text{gelb}} = 4,35 \text{cm}^2$$