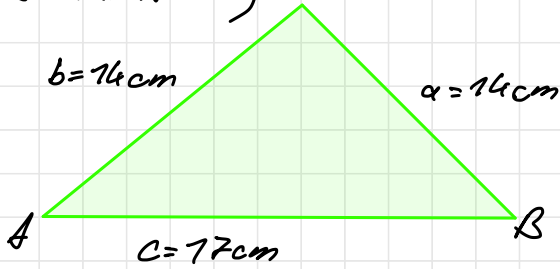


S 176 Nr 2c)



$$\begin{aligned} a &= 14 \text{ cm} \\ b &= 14 \text{ cm} \\ c &= 17 \text{ cm} \end{aligned}$$

Magnus

In Kosinussatz

$$(17 \text{ cm})^2 = (14 \text{ cm})^2 + (14 \text{ cm})^2 - (2 \cdot 14 \text{ cm} \cdot 14 \text{ cm}) \cdot \cos(\gamma) \quad | - (14 \text{ cm})^2 - (14 \text{ cm})^2$$

$$(17 \text{ cm})^2 - (14 \text{ cm})^2 - (14 \text{ cm})^2 = -392 \text{ cm}^2 \cdot \cos(\gamma) \quad |$$

$$-203 \text{ cm}^2 = -392 \text{ cm}^2 \cdot \cos(\gamma)$$

$$0,2628 = \cos(\gamma)$$

$$\Rightarrow \gamma = \arccos(0,2628) = 74,76^\circ$$

In Sinussatz

$$\frac{\sin(\alpha)}{14 \text{ cm}} = \frac{\sin(74,26)}{17 \text{ cm}} \quad | \cdot 14 \text{ cm}$$

$$\sin(\alpha) = \frac{\sin(74,76) \cdot 14 \text{ cm}}{17 \text{ cm}} = 0,7846$$

$$\Rightarrow \alpha = \arcsin(0,7846) = 52,67^\circ$$

Winkelsumme

$$180^\circ - 74,76^\circ - 52,67^\circ = 52,63^\circ$$



Flächeninhalt:

$$A = \frac{1}{2} \cdot \text{Grundseite} \cdot \text{Höhe}$$

$$h = b \cdot \sin(\alpha)$$

$$h = 14 \text{ cm} \cdot \sin(52,67)$$

$$h = 11,123 \text{ cm}$$

$$A = \frac{1}{2} \cdot 17 \text{ cm} \cdot 11,123 \text{ cm} = 94,546 \text{ cm}^2$$

