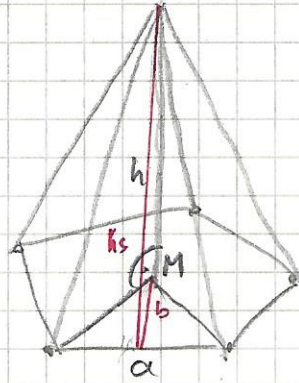


$$V_{\text{Zyl}} = 850 \text{ cm}^3$$

$$M_{\text{Zyl}} = M_{\text{Pyr}}$$



$$a = 8,0 \text{ cm}$$

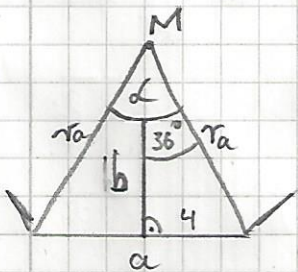
ges:  $h_{\text{Pyr}}$

$$M_{\text{Zyl}} = 2\pi r \cdot h_z$$

$$V_{\text{Zyl}} = \pi r^2 \cdot h_z \Rightarrow 850 = \pi r^2 \cdot 9,6 \Rightarrow r = 5,31 \text{ cm}$$

$$M_{\text{Zyl}} = 2 \cdot \pi \cdot 5,31 \cdot 9,6 \Rightarrow M_{\text{Zyl}} = 320,29 \text{ cm}^2$$

$$M_{\text{Pyr}} = 5 \cdot \frac{1}{2} \cdot a \cdot h_s$$

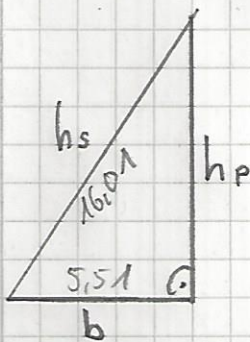


$$\angle = 72^\circ \quad b: \tan 36^\circ = \frac{4}{b} \Rightarrow b = 5,51 \text{ cm}$$

$$\frac{a}{2} = 4 \quad \left[ r_a = \sin 36^\circ = \frac{4}{r_a} \Rightarrow r_a = 6,181 \text{ cm} \right]$$

brauchen wir nicht!

Berechnung  $h_s$ :  $320,29 = 5 \cdot \frac{1}{2} \cdot 8 \cdot h_s \Rightarrow \underline{h_s = 16,01 \text{ cm}}$



$$h_p = \sqrt{16,01^2 - 5,51^2}$$

$$\boxed{h_p = 15,03 \text{ cm}}$$