

$$1. \quad V = \frac{1}{3} \cdot s^2 \cdot h \quad \rightarrow \quad s = \sqrt{\frac{3 \cdot V}{h}}$$

$$= \sqrt{\frac{3 \cdot 225 \text{ cm}^3}{12 \text{ cm}}}$$

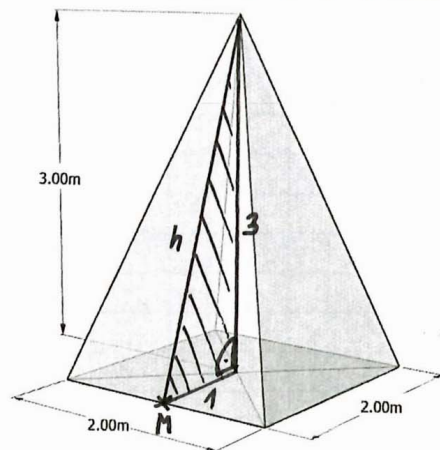
$$= \underline{\underline{7,5 \text{ cm}}}$$

①

$$2. \quad h = \sqrt{3^2 + 1^2} = \underline{\underline{\sqrt{10} \text{ m}}}$$

$$M = 4 \cdot \frac{2 \text{ m} \cdot \sqrt{10} \text{ m}}{2}$$

$$= \underline{\underline{4 \cdot \sqrt{10} \text{ m}^2}}$$



①½

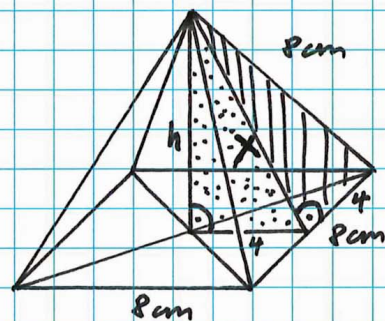
$$3. \quad x = \sqrt{8^2 - 4^2}$$

$$= \sqrt{64 - 16} = \underline{\underline{\sqrt{48} \text{ cm}}}$$

$$h = \sqrt{x^2 - 4^2}$$

$$= \sqrt{48^2 - 4^2}$$

$$= \underline{\underline{\sqrt{48 - 16} = \sqrt{32} \text{ cm}}}$$



①½

$$4. \quad u = 2 \cdot r \cdot \pi \quad \rightarrow \quad r = \frac{u}{2 \cdot \pi} = \frac{320 \text{ m}}{2 \cdot \pi} \approx \underline{\underline{50,9 \text{ m}^{1/2}}}$$

$$h = 0,5 \cdot r \approx \underline{\underline{25,5 \text{ m}^{1/2}}}$$

$$V = \frac{1}{3} \cdot r^2 \cdot \pi \cdot h \approx \underline{\underline{69'168,595 \text{ m}^2^{1/2}}}$$

①½



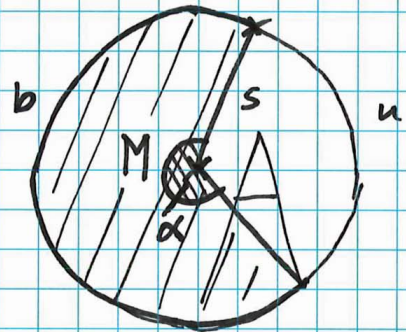
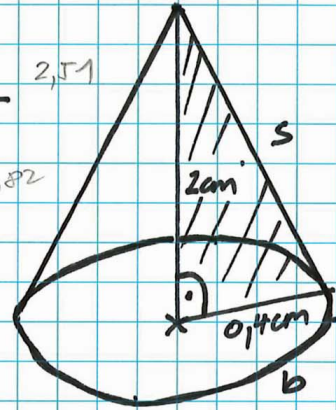
5.

$$s = \sqrt{2^2 + 0,4^2} = \sqrt{4,16} \text{ cm} \quad 2,04$$

$$b = 2 \cdot 0,4 \text{ cm} \cdot \pi = 0,8 \cdot \pi \text{ cm} \quad 2,51$$

$$u = 2 \cdot s \cdot \pi = 2 \cdot \sqrt{4,16} \cdot \pi \text{ cm} \quad 12,82$$

u/b	$\alpha$
u	$360^\circ$
b	$\sim 70,6^\circ$ 1



$$A = s^2 \cdot \pi = (\sqrt{4,16} \text{ cm})^2 \cdot \pi$$

$$= 4,16 \cdot \pi \text{ cm}^2 \quad 12,97$$

A/M	$\alpha$
A	$360^\circ$
$\sim 2,56 \text{ cm}^2$	$\sim 70,6^\circ$

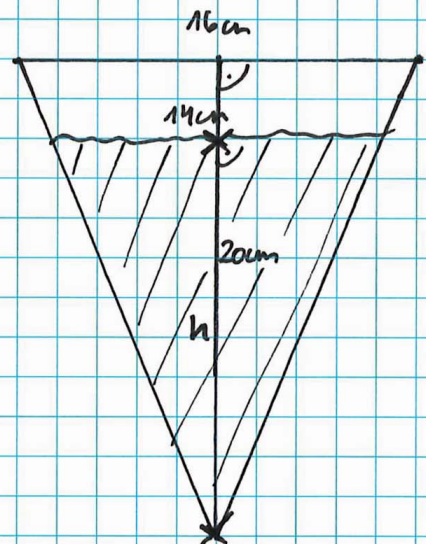
6.

$$\frac{16}{20} = \frac{14}{h} \quad \rightarrow h = 17,5 \text{ cm} \quad \frac{7}{4}$$

$$V = \frac{1}{3} \cdot r^2 \cdot \pi \cdot h$$

$$= \frac{1}{3} \cdot (7 \text{ cm})^2 \cdot \pi \cdot 17,5 \text{ cm}$$

$$\hat{=} 897,972 \text{ cm}^3 \quad \frac{7}{4}$$



9 Pkte