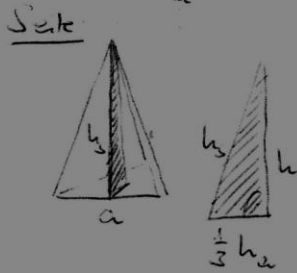
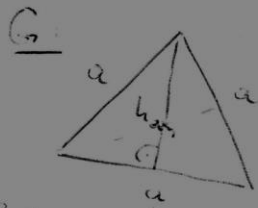


5.39 Nr. 2 b) Lins



$$\begin{aligned} \textcircled{1} \quad h_a &= \sqrt{a^2 - \left(\frac{a}{2}\right)^2} \\ &= \sqrt{2,8^2 - \left(\frac{2,8}{2}\right)^2} \\ h_a &= 2,42 \text{ dm} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad G &= \frac{a \cdot h_a}{2} \\ G &= \frac{2,8 \cdot 2,42}{2} \\ G &= 3,34 \text{ dm}^2 \end{aligned}$$

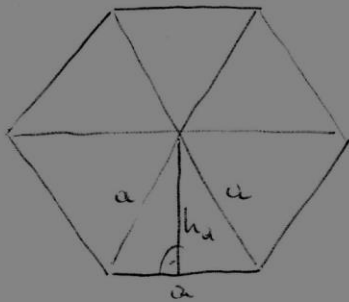
$$\begin{aligned} \textcircled{4} \quad V &= \frac{1}{3} \cdot G \cdot h \\ &= \frac{1}{3} \cdot 3,34 \cdot 7,1 \\ V &= 8,02 \text{ dm}^3 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad M &= 3 \cdot \frac{a \cdot h_s}{2} \\ &= 3 \cdot \frac{2,8 \cdot 7,15}{2} \\ &= 30,03 \text{ dm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad h_s &= \sqrt{\left(\frac{1}{3} h_a\right)^2 + h^2} \\ &= \sqrt{\left(\frac{1}{3} \cdot 2,42\right)^2 + 7,1^2} \\ &= 7,15 \text{ dm} \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad O &= G + M \\ &= 3,34 + 30,03 \\ &= 33,42 \text{ dm}^2 \end{aligned}$$

S 84 Nr. 2a) rechte



$$\left(\frac{a}{2}\right)^2 + h_a^2 = a^2$$

$$h_a = \sqrt{a^2 - \left(\frac{a}{2}\right)^2}$$

$$G = 6 \cdot \frac{a \cdot h_a}{2}$$

$$= 3 \cdot a \cdot h_a$$

$$G = 3 \cdot a \cdot \sqrt{a^2 - \left(\frac{a}{2}\right)^2}$$

$$G = 3 \cdot a \cdot \sqrt{a^2 - \frac{a^2}{4}}$$

$$= 3 \cdot a \cdot \sqrt{\frac{3}{4} a^2}$$

$$= 3 \cdot a \cdot \frac{\sqrt{3}}{2} a$$

$$G = \frac{3 \cdot \sqrt{3}}{2} a^2$$

$$52,57 = \frac{3 \cdot \sqrt{3}}{2} a^2$$

$$\frac{2 \cdot 52,57}{3 \cdot \sqrt{3}} = a^2 \quad | \sqrt{\quad}$$

$$20,23 = a^2 \quad | \sqrt{\quad}$$

$$\underline{4,50 \text{ cm} = a}$$

