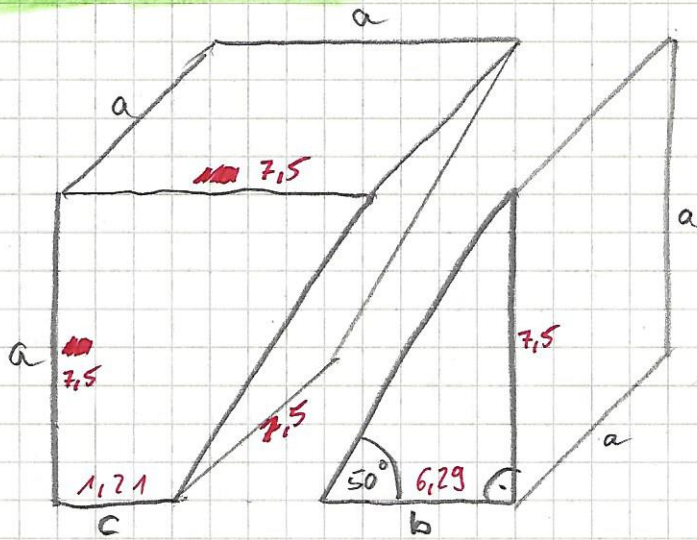


S. 205 Nr. 13



$$V_W = 422 \text{ cm}^3$$

$$V_W = a^3$$

$$422 = a^3$$

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

$$b : \tan 50 = \frac{7,5}{b} \Rightarrow b = \frac{7,5}{\tan 50} \Rightarrow b = 6,29$$

$$c = 7,5 - 6,29$$

$$c = 1,21$$

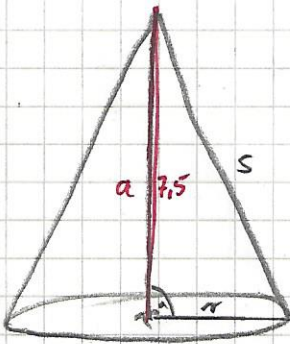
$$V_{PA} = G \cdot h$$

$$= \frac{1}{2} \cdot 6,29 \cdot 7,5 \cdot 7,5$$

$$V_{PA} = 176,91 \text{ cm}^3$$

$$V_{PT} = 422 - 176,91$$

$$V_{PT} = 245,09 \text{ cm}^3$$



$$O_{Ke} = \pi r^2 + \pi \cdot r \cdot s$$

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

$$245,09 = \frac{1}{3} \cdot \pi \cdot r^2 \cdot 7,5$$

$$r^2 = 31,2 \dots$$

$$r = 5,59 \text{ cm}$$

$$s = \sqrt{7,5^2 + 5,59^2}$$

$$s = 9,35 \text{ cm}$$

$$O_{Ke} = \pi \cdot 5,59^2 + \pi \cdot 5,59 \cdot 9,35$$

$$O_{Ke} = 262,37 \text{ cm}^2$$