

s. 23

Lieriö / särmiö

tilavuus = pohjan pinta-ala · korkeus

$$V = \underline{A_p} \cdot \underline{h}$$

(53)

$$\begin{aligned} b) \quad V &= \overset{A_p}{3,14} \cdot (2\text{ m})^2 \cdot \overset{h}{7\text{ m}} \\ &= 12,56\text{ m}^2 \cdot 7\text{ m} \\ &= 87,92\text{ m}^3 \\ &\approx 88\text{ m}^3 \end{aligned}$$

$$\textcircled{\bullet} A = \pi r^2$$

$\pi \approx 3,14$

$$\begin{aligned} c) \quad d &= 5\text{ cm (halkaisija)} \\ r &= \frac{5\text{ cm}}{2} = 2,5\text{ cm} \end{aligned}$$

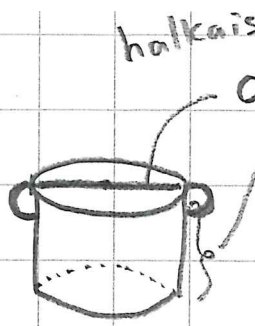
$$\begin{aligned} V &= \overset{A_p}{3,14} \cdot (2,5\text{ cm})^2 \cdot \overset{h}{5\text{ cm}} \\ &= 19,625\text{ cm}^2 \cdot 5\text{ cm} \\ &= 98,125\text{ cm}^3 \\ &\approx 98\text{ cm}^3 \end{aligned}$$

(54)

$$\begin{aligned} b) \quad V &= \overset{A_p}{2\text{ cm} \cdot 2\text{ cm}} \cdot \overset{h}{8\text{ cm}} \\ &= 4\text{ cm}^2 \cdot 8\text{ cm} \\ &= 32\text{ cm}^3 \end{aligned}$$

$$\begin{aligned} c) \quad V &= \frac{\overset{A_p}{1,5\text{ m} \cdot 1,5\text{ m}}}{2} \cdot \overset{h}{2\text{ m}} \\ &= 1,125\text{ m}^2 \cdot 2\text{ m} = 2,25\text{ m}^3 \\ &\quad (\approx 2,3\text{ m}^3) \end{aligned}$$

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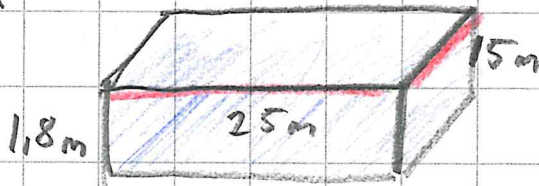


halkaisija
 $d = 180 \text{ mm}$
 $h = 200 \text{ mm}$

säde
 $r = \frac{180 \text{ mm}}{2} = 90 \text{ mm}$

$$\begin{aligned} V &= 3,14 \cdot (90 \text{ mm})^2 \cdot 200 \text{ mm} \\ &= 25434 \text{ mm}^2 \cdot 200 \text{ mm} \\ &= 5086800 \text{ mm}^3 \\ &= 5,0868 \text{ dm}^3 \\ &= 5,0868 \text{ l} \\ &\approx 5,1 \text{ l} \end{aligned}$$

62 a



$$\begin{aligned} V &= 25 \text{ m} \cdot 15 \text{ m} \cdot 1,8 \text{ m} \\ &= 375 \text{ m}^2 \cdot 1,8 \text{ m} \\ &= 675 \text{ m}^3 \\ &= 675000 \text{ dm}^3 \\ &= 675000 \text{ l} \end{aligned}$$