

5.34 t, 110

$$a) V = \frac{4 \cdot 3,14 \cdot (65 \text{ mm})^3}{3} = 1\,149\,763,333 \text{ mm}^3 \approx 1\,100\,000 \text{ mm}^3$$

$$b) d = 12,8 \text{ dm} \quad r = 6,4 \text{ dm}$$

$$V = \frac{4 \cdot 3,14 \cdot (6,4 \text{ dm})^3}{3} = 1097,509 \dots \text{ dm}^3 \approx 1100 \text{ dm}^3$$

$$g) V = \frac{4 \cdot 3,14 \cdot (25 \text{ cm})^3}{3} = 65\,416,66 \dots \text{ cm}^3 \approx 65\,000 \text{ cm}^3$$

Kertausta

Välikoe on to 25.1. !

Yksikönmuunnokset:

Pituus:

$$:10 \begin{matrix} \text{m} \\ \text{cm} \end{matrix} \uparrow \cdot 10$$

dm

m

dam

hm

km

Pinta-ala:

$$:100 \begin{matrix} \text{mm}^2 \\ \text{cm}^2 \end{matrix} \uparrow \cdot 100$$

dm²

m²

a

ha

km²

Tilavuus:

$$:1000 \begin{matrix} \text{mm}^3 \\ \text{cm}^3 \end{matrix} \uparrow \cdot 1000$$

dm³

m³

-

-

km³

$$178 \text{ cm} = \underline{1,78} \text{ m}$$

$$2,4 \text{ km}^2 = \underline{24000} \text{ a}$$

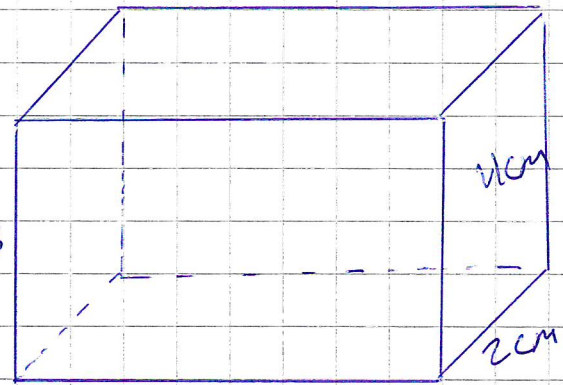
$$1 \text{ dm}^3 = 1 \text{ l}$$

$$2453 \text{ mm} = \underline{2,453} \text{ dm} \quad 254 \text{ dm}^2 = \underline{2,54} \text{ m}^2$$

Tilavuudet

Suorakulmainen särmiö

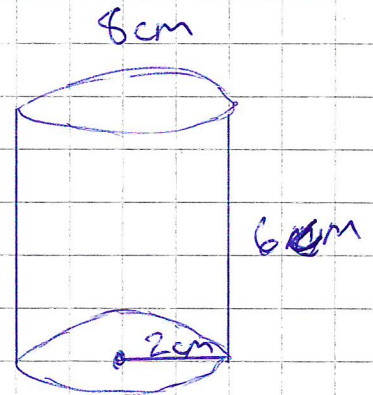
$$V = 8 \text{ cm} \cdot 2 \text{ cm} \cdot 4 \text{ cm} = 64 \text{ cm}^3$$



Ympyrälieriö

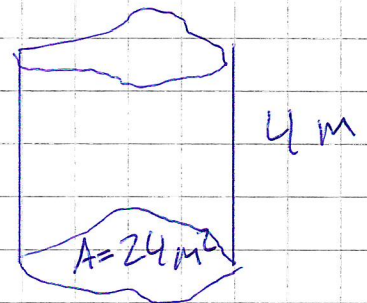
$$A = 3,14 \cdot (2 \text{ cm})^2 = 12,56 \text{ cm}^2$$

$$V = 12,56 \text{ cm}^2 \cdot 6 \text{ cm} = 75,36 \text{ cm}^3$$
$$\approx 75 \text{ cm}^3$$



Lieriö:

$$V = 24 \text{ m}^2 \cdot 4 \text{ m} = 96 \text{ m}^3$$



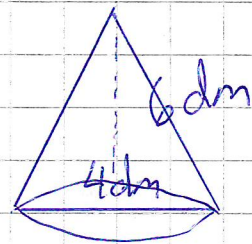
Ympyräkartio: $d = 4 \text{ dm}$

$$r = 2 \text{ dm}$$

$$A = 3,14 \cdot (2 \text{ dm})^2 = 12,56 \text{ dm}^2$$

$$V = \frac{12,56 \text{ dm}^2 \cdot 6 \text{ dm}}{3} = 25,12 \text{ dm}^3$$

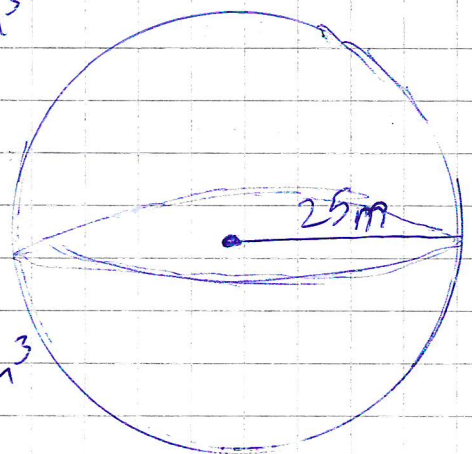
$$\approx 25 \text{ dm}^3$$



Pallo

$$V = \frac{4 \cdot 3,14 \cdot (25 \text{ m})^3}{3} = 65\,416 \text{ m}^3$$

$$\approx 65\,000 \text{ m}^3$$



S. 39 k. 135, 136
147, 148, 151, 152, 155
Vastaukset: S. 44