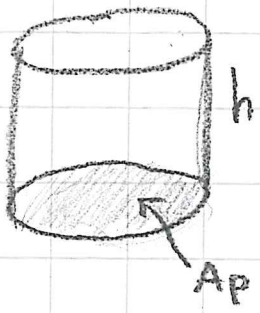
Lieriö (s. 21)

tilavuus = pohjan pinta-ala · korkeus

$$V = A_p \cdot h$$

• ympyrälieriö



$$V = A_p \cdot h$$
$$= \pi r^2 \cdot h$$

s. 23 (53) a) $r = 4\,cm$, $h = 6\,cm$

$$V = 3{,}14 \cdot (4\,cm)^2 \cdot 6\,cm$$
$$= 50{,}24\,cm^2 \cdot 6\,cm$$
$$= 301{,}44\,cm^3$$
$$\approx 300\,cm^3$$

b) $r = 2{,}0\,m$, $h = 7{,}0\,m$

$$V = 3{,}14 \cdot (2\,m)^2 \cdot 7\,m$$
$$= 87{,}92\,m^3$$
$$\approx 88\,m^3$$

c) halkaisija $d = 5{,}0\,cm$

säde $r = \frac{5{,}0\,cm}{2} = 2{,}5\,cm$

korkeus $h = 5{,}0\,cm$

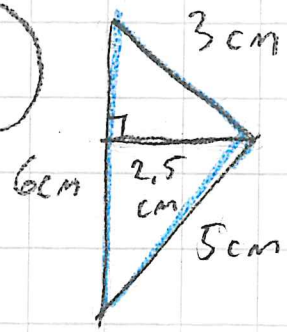
S. 10 (13) a) 369 cm (m) :10 :10
= 3,69 m

b) 421 cm^2 (dm^2) :100
= 4,21 dm^2

c) 0,0062 km^3 (m^3) ·1000 ·1000 ·1000
= 6 200 000 m^3

d) 47,2 dm^3 (l (litrao))
= 47,2 l

S. 14 (32)



$$A_{kolmio} = \frac{a \cdot h}{2}$$

a) $A = \frac{6\,cm \cdot 2{,}5\,cm}{2}$

$= 7{,}5\ cm^2$

b) 

$$A_{suora-kulmio} = a \cdot h$$

$A = 1{,}2\ km \cdot 1{,}2\ km$
$= 1{,}44\ km^2$

c) 

$$A_{ympyrä} = \pi r^2$$

$A = 3{,}14 \cdot (23\,cm)^2 = 1661{,}06\ cm^2 \approx 1700\ cm^2$

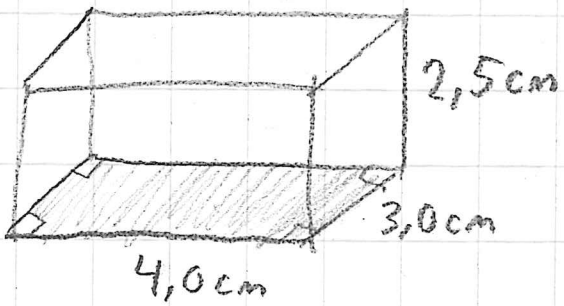
$$V = 3{,}14 \cdot (2{,}5\,cm)^2 \cdot 5\,cm$$
$$= 98{,}125\,cm^3$$
$$\approx 98\,cm^3$$

• särmiö

$$V = A_p \cdot h$$

54

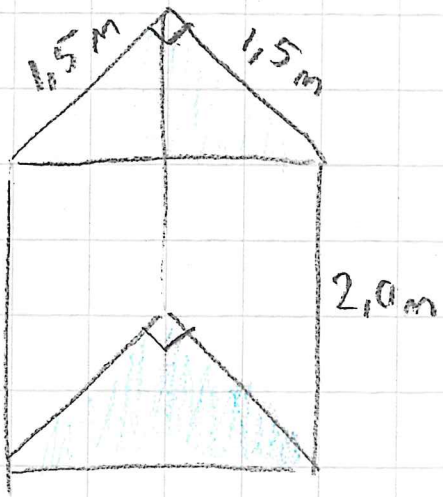
a)



$$V = \underbrace{4\,cm \cdot 3\,cm}_{A_p} \cdot \underbrace{2{,}5\,cm}_{h}$$
$$= 12\,cm^2 \cdot 2{,}5\,cm$$
$$= 30\,cm^3$$

b) $V = 2\,cm \cdot 2\,cm \cdot 8\,cm$
$= 32\,cm^3$

c)



$$V = \underbrace{\frac{1{,}5\,m \cdot 1{,}5\,m}{2}}_{A_p} \cdot \underbrace{2\,m}_{h}$$
$$= 1{,}125\,m^2 \cdot 2\,m$$
$$= 2{,}25\,m^3$$

69 70 s. 25