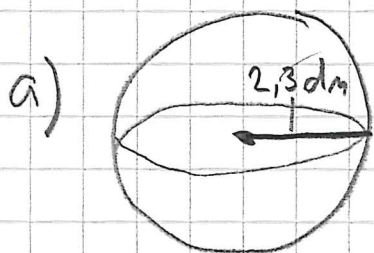


155
s. 39

Pallo

$$V = \frac{4\pi r^3}{3}$$

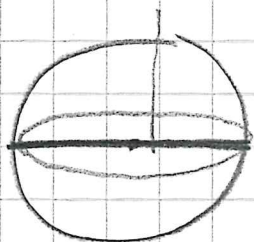


$$V = \frac{4 \cdot 3,14 \cdot (2,3 \text{ dm})^3}{3}$$
$$= 50,93... \text{ dm}^3$$
$$\approx 51 \text{ dm}^3$$

b)

halkaisija

$$d = 6,5 \text{ m} \quad r = \frac{6,5 \text{ m}}{2} = 3,25 \text{ m}$$



$$V = \frac{4 \cdot 3,14 \cdot (3,25 \text{ m})^3}{3}$$
$$= 143,72... \text{ m}^3$$
$$\approx 140 \text{ m}^3$$

s. 34

105

$$d = 51 \text{ cm} \quad \text{halkaisija} : 2$$
$$r = 25,5 \text{ cm} \quad \text{säde}$$

$$V = \frac{4 \cdot 3,14 \cdot (25,5 \text{ cm})^3}{3}$$

$$= 69420,69 \text{ cm}^3$$
$$\approx 69000 \text{ cm}^3 \quad : 1000$$
$$= 69 \text{ dm}^3$$
$$= 69 \text{ l}$$

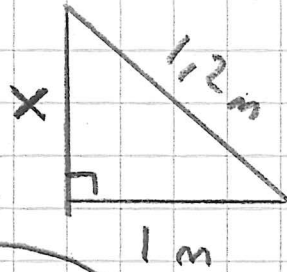
Puhallus 5l

$$\frac{69 \text{ l}}{5 \text{ l}} = 13,8$$

Vastaus: 14 kertaa

256 b)

S.65



$$a^2 + b^2 = c^2$$

$$x^2 + 1^2 = 1,2^2$$

$$x^2 + 1 = 1,44$$

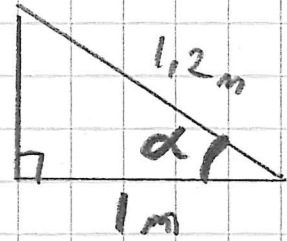
$$x^2 = 0,44$$

$$x = \sqrt{0,44}$$

$$x = 0,663...$$

$$x \approx 0,7 \text{ m}$$

// -1



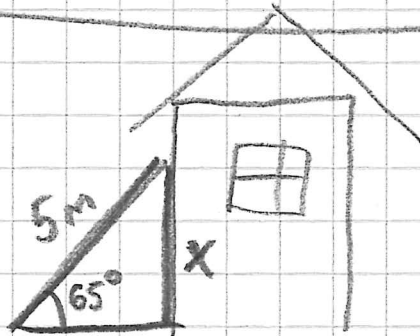
$$\cos \alpha = \frac{1}{1,2}$$

$$\cos \alpha \approx 0,833$$

$$\alpha \approx 34^\circ$$

SHIFT COS

$$\cos^{-1} 0,833$$

257 b)

$$\sin 65^\circ = \frac{x}{5} \quad // \cdot 5$$

$$0,906 \cdot 5 = x$$

$$x = 4,53$$

$$x \approx 4,5 \text{ m}$$