

VOLUME (2)

eulagere:

23/188 Cub cu $V = 3375 \text{ cm}^3$

$l = ?$

$V = l^3 \Rightarrow l^3 = 3375 \text{ cm}^3 \Rightarrow l = 5^3 \cdot 3^3$

$l = 5 \cdot 3$

$l = 15 \text{ cm}$

3375	5	}	5
675	5		
135	5		
27	3	}	3
9	3		
3	3		
1			

24/188. $L, l, h = ?$ $L, l, h = \text{nr. nat.}$

$V_{\text{paralelip}} = 105 \text{ cm}^3$

$L \cdot l \cdot h = 105 \Rightarrow l = 3 \text{ cm}$

$L = 7 \text{ cm}$ sau alte variante.

$h = 5 \text{ cm}$

105	5
21	3
7	7
1	

25/188 $V_{\text{paral.}} = ?$

$l = x$

$L = x + 2$

$h = x + 4$

$4 \cdot L + 4l + 4h = 72 \quad | :4$

$L + l + h = 18$

$x + 2 + x + x + 4 = 18$

$3x + 6 = 18$

$3x = 12 \Rightarrow x = 4 \Rightarrow l = 4 \text{ cm}$

$L = 6 \text{ cm}$

20/188 Vas = paral. dr. cu $L = 9 \text{ cm}$, $l = 4 \text{ cm}$, $h = 10 \text{ cm}$

contine un cub de metal.

Dupa scoaterea cubului din vas, apa coboara 4 cm .

$l_{\text{cub}} = ?$

$$V_{\text{cub}} = V_{\text{apa deplasata}}$$

Apa deplasata ia forma de paralelip. cu

$$L = 9 \text{ cm}, l = 4 \text{ cm}, h = 6 \text{ cm}$$

$$V_{\text{apa}} = 9 \text{ cm} \cdot 4 \text{ cm} \cdot 6 \text{ cm} = 246 \text{ cm}^3$$

$$V_{\text{cub}} = 246 \text{ cm}^3$$

$$l^3 = 246 \text{ cm}^3 \Rightarrow l^3 = 6^3 \Rightarrow l_{\text{cub}} = 6 \text{ cm}$$

17/213 manual

acvariu = paral. dr. cu $L = 80 \text{ cm}$, $l = 50 \text{ cm}$, $h = 6 \text{ dm}$

$$h_{\text{apa}} = \frac{5}{6} \cdot h = \frac{5}{6} \cdot 6 \text{ dm} = 5 \text{ dm}$$

Se scot 80 l apa.

$$\text{a) } V_{\text{acvariu}} = L \cdot l \cdot h = 80 \text{ cm} \cdot 50 \text{ cm} \cdot 60 \text{ cm} = 240000 \text{ cm}^3 = 240 \text{ dm}^3 =$$

b) Cu cati cm a scapat nivelul apei? $L = 240 \text{ l}$

$V_{\text{apa scasa}} = V_{\text{paralelip}}$ (apa ia forma vesului)

$$80 \text{ dm}^3 = L \cdot l \cdot h_{\text{apa}} \quad | \quad 80 = 40 \cdot h \Rightarrow h = \frac{80}{40}$$

$$80 \text{ dm}^3 = 8 \cdot 5 \cdot h_{\text{apa}} \quad | \quad h = 2 \text{ dm} = 20 \text{ cm}$$