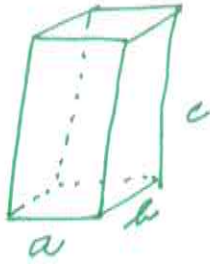


# 10. Dů - řešení

1)



a)  $a = 8 \text{ cm}$   
 $b = 7 \text{ cm}$   
 $c = 5 \text{ cm}$   
 $V = ? \text{ cm}^3$

$$V = a \cdot b \cdot c$$

$$V = 8 \cdot 7 \cdot 5$$

$$V = 280 \text{ cm}^3$$

b)  $a = 4 \text{ dm}$   
 $b = 6 \text{ dm}$   
 $c = 9 \text{ dm}$   
 $V = ? \text{ dm}^3$

$$V = a \cdot b \cdot c$$

$$V = 4 \cdot 6 \cdot 9$$

$$V = 216 \text{ dm}^3$$

c)  $a = 3 \text{ cm}$   
 $b = 6 \text{ cm}$   
 $c = 3 \text{ cm}$   
 $V = ? \text{ cm}^3$

$$V = a \cdot b \cdot c$$

$$V = 3 \cdot 6 \cdot 3$$

$$V = 54 \text{ cm}^3$$

d)  $a = 48 \text{ cm}$   
 $b = 48 \text{ cm}$   
 $c = 96 \text{ cm}$   
 $V = ? \text{ cm}^3$

$$V = a \cdot b \cdot c$$

$$V = 48 \cdot 48 \cdot 96$$

$$V = 221 184 \text{ cm}^3$$

2)  $V = 1 \text{ cm}^3$   
 $m = 11,3 \text{ g}$   
 $\rho = ? \text{ g/cm}^3$

$$\rho = \frac{m}{V}$$

$$\rho = \frac{11,3}{1} = 11,3 \text{ g/cm}^3$$

olověná krychle má hustotu 11,3 g/cm<sup>3</sup>

3)  $V = 2 \text{ m}^3$   
 $m = 1834 \text{ kg}$   
 $\rho = ? \text{ kg/m}^3$

$$\rho = \frac{m}{V}$$

$$\rho = \frac{1834}{2} = 917 \text{ kg/m}^3$$

Hustota kryje 917 kg/m<sup>3</sup>

4)  $m = 30 \text{ g}$   
 $V = 12 \text{ cm}^3$   
 $\rho = ? \text{ g/cm}^3$

$$\rho = \frac{m}{V}$$

$$\rho = \frac{30}{12} = \frac{5}{2} = 2,5 \text{ g/cm}^3$$

Klíčen má hustotu 2,5 g/cm<sup>3</sup>.

5)  $a = 3 \text{ m}$   
 $b = 1,5 \text{ m}$   
 $c = 0,75 \text{ m}$   
 $V = ? \text{ m}^3$

$$V = a \cdot b \cdot c$$

$$V = 3 \cdot 1,5 \cdot 0,75$$

$$V = 3,375 \text{ m}^3$$

Hustota písku je 1500 kg/m<sup>3</sup>

$m = 1500 \cdot 3,375$   
 $m = 5062,5 \text{ kg}$   
 $\rho = ? \text{ kg/m}^3$

$$\rho = \frac{m}{V}$$

$$\rho = \frac{5062,5}{3,375} = 1500 \text{ kg/m}^3$$

$$g) \rho = 2500 \text{ kg/m}^3$$

$$a = 75 \text{ cm}$$

$$b = 120 \text{ cm}$$

$$c = 2 \text{ mm} = 0,2 \text{ cm}$$

$$V = ? \text{ cm}^3 \dots \text{ m}^3$$

$$m = ? \text{ kg}$$

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$$V = a \cdot b \cdot c$$

$$V = 75 \cdot 120 \cdot 0,2$$

$$V = 15 \cdot 120 = 1800 \text{ cm}^3 = 0,0018 \text{ m}^3$$

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$$m = \rho \cdot V$$

$$m = 2500 \cdot 0,0018$$

$$m = 4,5 \text{ kg}$$

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Hmotnost skleněné tabule je 4,5 kg.