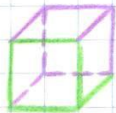


PROSTORNINA KVADRA IN KOCKE

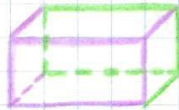
6. razred

10. teden, 4. ura

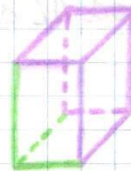
163/2.a)



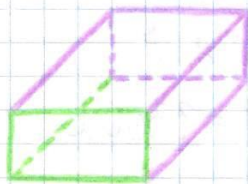
b)



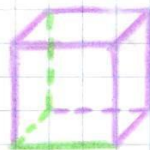
c)



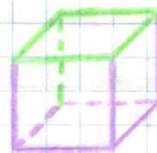
č)



d)



e)



5.) Pri tej nalogi je več možnih poti reševanja!

$$\begin{aligned} \text{a) } 2 \cdot 3 + 3 \cdot 5 + 4 \cdot 5 \cdot 3 &= \\ &= 6 + 15 + 60 = \\ &= \underline{\underline{81 \text{ kock}}} \end{aligned}$$

$$\begin{aligned} \text{b) } 3 + 4 + 2 \cdot 4 + 2 \cdot 2 &= \\ &= 3 + 4 + 8 + 4 = \\ &= \underline{\underline{19 \text{ kock}}} \end{aligned}$$

$$\begin{aligned} \text{7.) a) } a &= 1,8 \text{ m} = 18 \text{ dm} \\ b &= 6 \text{ dm} \\ c &= 45 \text{ cm} = 4,5 \text{ dm} \\ V &= ? \end{aligned}$$

$$\begin{array}{r} 4,5 \cdot 6 \\ \hline 27,0 \end{array}$$

$$\begin{array}{r} 27 \cdot 18 \\ \hline 27 \\ + 216 \\ \hline 486 \end{array}$$

Emote pretvorimo v dm, ker je $1 \text{ l} = 1 \text{ dm}^3$.

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

$$V = 18 \cdot 6 \cdot 4,5$$

$$V = 486 \text{ dm}^3 = \underline{\underline{486 \text{ l}}}$$

Odg.: Nalijem lahko 486 l vode.

$$\begin{aligned} \text{b) } a &= 0,4 \text{ m} = 4 \text{ dm} \\ V &= ? \end{aligned}$$

$$V = a^3$$

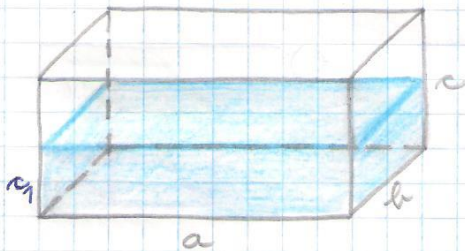
$$V = 4^3 = 4 \cdot 4 \cdot 4$$

$$V = 64 \text{ dm}^3 = \underline{\underline{64 \text{ l}}}$$

Odg.: Nalijem lahko 64 l vode.

$$\begin{aligned}
 g.) \quad a &= 8 \text{ m} = 80 \text{ dm} \\
 b &= 0,7 \text{ m} = 7 \text{ dm} \\
 c &= 1,2 \text{ m} = 12 \text{ dm} \\
 c_1 &= \frac{1}{2} \text{ od } 12 \text{ dm} = 6 \text{ dm} \\
 V &= ?
 \end{aligned}$$

SKICA:



Dve možnosti za reševanje:

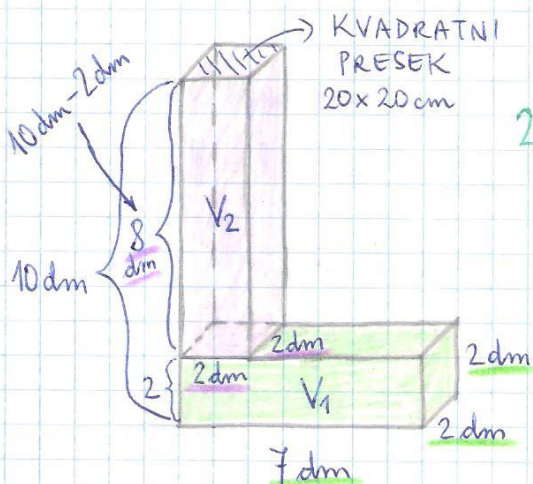
$$\begin{aligned}
 1.) \quad V &= a \cdot b \cdot c_1 && \frac{42 \cdot 80}{3360} \\
 V &= 80 \cdot 7 \cdot 6 \\
 V &= 3360 \text{ dm}^3 = \underline{\underline{3360 \text{ l}}}
 \end{aligned}$$

ali

$$\begin{aligned}
 2.) \quad V &= a \cdot b \cdot c && \frac{84 \cdot 80}{2720} \\
 V &= 80 \cdot 7 \cdot 12 \\
 V &= 6720 \text{ dm}^3 \\
 6720 : 2 &= \underline{\underline{3360 \text{ l}}}
 \end{aligned}$$

Odg.: V jarku je 3360 l vode.

164/10.a) Enote spremenimo v dm, da potem računamo z manjšimi števili.



Črke si razdelimo na 2 dela, 2 kvadra (imamo 2 možnosti).

1. KVADER

$$\begin{aligned}
 a_1 &= 7 \text{ dm} \\
 b_1 &= 2 \text{ dm} \\
 c_1 &= 2 \text{ dm}
 \end{aligned}$$

2. KVADER

$$\begin{aligned}
 a_2 &= 2 \text{ dm} \\
 b_2 &= 2 \text{ dm} \\
 c_2 &= 8 \text{ dm}
 \end{aligned}$$

$$\begin{aligned}
 V_1 &= a_1 \cdot b_1 \cdot c_1 \\
 V_1 &= 7 \cdot 2 \cdot 2 \\
 V_1 &= \underline{\underline{28 \text{ dm}^3}}
 \end{aligned}$$

$$\begin{aligned}
 V_2 &= a_2 \cdot b_2 \cdot c_2 \\
 V_2 &= 2 \cdot 2 \cdot 8 \\
 V_2 &= \underline{\underline{32 \text{ dm}^3}}
 \end{aligned}$$

$$\begin{aligned}
 V &= V_1 + V_2 \\
 V &= 28 + 32 \\
 V &= \underline{\underline{60 \text{ dm}^3}}
 \end{aligned}$$

Odg.: Prostornina črke L meri 60 dm^3 (60000 cm^3).