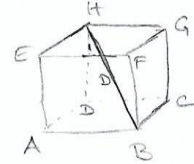


Dragi moji,

prije nego krenemo, donosim rješenja zadataka koje ste trebali riješiti prošli put.

$\sqrt{3} \in \mathbb{R}$



10. a) $a = 5 \text{ cm}$
 $D = ?$

$D = a\sqrt{3}$

$D = 5\sqrt{3} \text{ cm}$

b) $a = 2\sqrt{3}$
 $D = ?$

$D = a\sqrt{3}$

$D = 2\sqrt{3} \cdot \sqrt{3}$

$D = 2\sqrt{9}$

$D = 2 \cdot 3$

$D = 6$

Nije zadana mjerna jedinica pa ju ne treba ni pisati u rješenju.

11. a) $d = 11\sqrt{2}$
 $D = ?$

$D = a\sqrt{3}$

$D = 11\sqrt{3}$

$d = a\sqrt{2}$

$11\sqrt{2} = a\sqrt{2} \quad | : \sqrt{2}$

$11 = a$

b) $d = 8$
 $D = ?$

$D = a\sqrt{3}$

$D = 4\sqrt{2} \cdot \sqrt{3}$

$D = 4\sqrt{6}$

$d = a\sqrt{2}$

$8 = a\sqrt{2}$

$a\sqrt{2} = 8 \quad | : \sqrt{2}$

$a = \frac{8}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$

$a = \frac{8\sqrt{2}}{\sqrt{4}}$

$a = \frac{8\sqrt{2}}{2}$

$a = 4\sqrt{2}$

12. a) $D = 7\sqrt{3}$
 $a = ?$

$D = a\sqrt{3}$

$7\sqrt{3} = a\sqrt{3} \quad | : \sqrt{3}$

$7 = a$

$a = 7$

b) $D = 15$
 $a = ?$

$D = a\sqrt{3}$

$15 = a\sqrt{3}$

$a\sqrt{3} = 15 \quad | : \sqrt{3}$

$a = \frac{15}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}}$

$a = \frac{15\sqrt{3}}{\sqrt{9}}$

$a = \frac{15\sqrt{3}}{3}$

$a = 5\sqrt{3}$

Moramo racionalizirati jer nam korijen ne može biti u nazivniku

13.) $a = 3 \text{ cm}$
 $b = 5 \text{ cm}$
 $c = 9 \text{ cm}$
 $D = ?$

$$D = \sqrt{a^2 + b^2 + c^2}$$

$$D = \sqrt{3^2 + 5^2 + 9^2}$$

$$D = \sqrt{9 + 25 + 81}$$

$$D = \sqrt{115} \text{ cm}$$

14.) $d = 5 \text{ cm}$
 $c = 12 \text{ cm}$
 $D = ?$

$$D^2 = c^2 + d^2$$

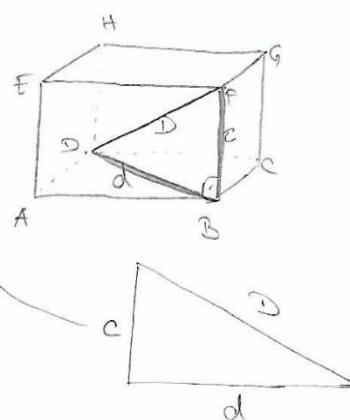
$$D^2 = 12^2 + 5^2$$

$$D^2 = 144 + 25$$

$$D^2 = 169 / \sqrt{\quad}$$

$$D = 13 \text{ cm}$$

stranica c se često
 naziva i visina



Nadam se da ste sve točno riješili! 😊

Danas nastavljamo dalje s gradivom. Pogledajte videa na poveznicama

<https://www.youtube.com/watch?v=4cdWuoe2SJ8>

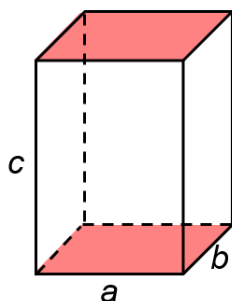
i

<https://www.youtube.com/watch?v=lnzzPEmlWdI>

Nakon toga otvorite bilježnicu i zapišite:

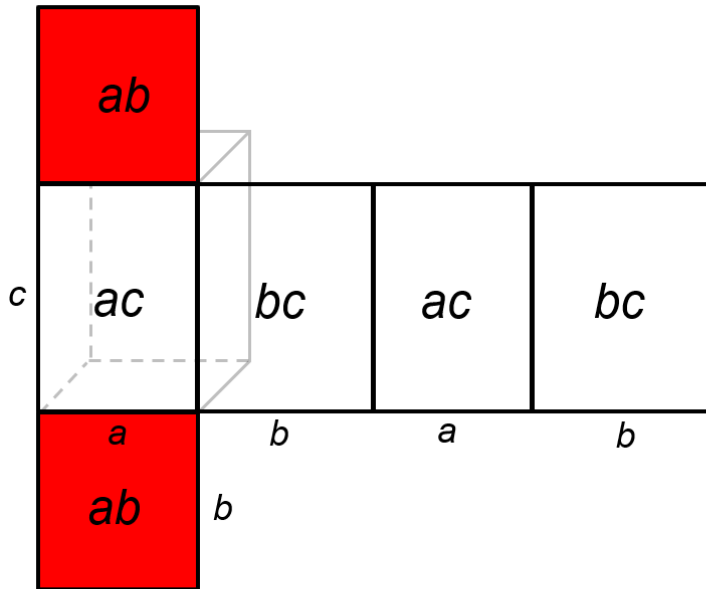
OPLOŠJE I VOLUMEN KVADRA I KOCKE

KVADAR



$$V = B \cdot v$$

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



$$O = 2ab + 2ac + 2bc$$

Primjer 1:

Izračunaj oplošje i obujam kvadra duljine 5 dm, širine 3 dm i visine 12 cm.

$$a = 5 \text{ dm}$$

$$b = 3 \text{ dm}$$

$$c = 12 \text{ cm} = 1.2 \text{ dm}$$

$$O = ? \quad V = ?$$

$$O = 2(ab + bc + ac)$$

$$O = 2(5 \cdot 3 + 3 \cdot 1.2 + 5 \cdot 1.2)$$

$$O = 2(15 + 3.6 + 6)$$

$$O = 2 \cdot 24.6$$

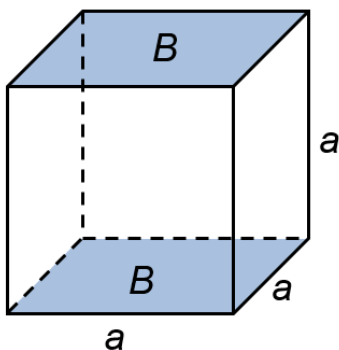
$$O = 49.2 \text{ dm}^2$$

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

$$V = 5 \cdot 3 \cdot 1.2$$

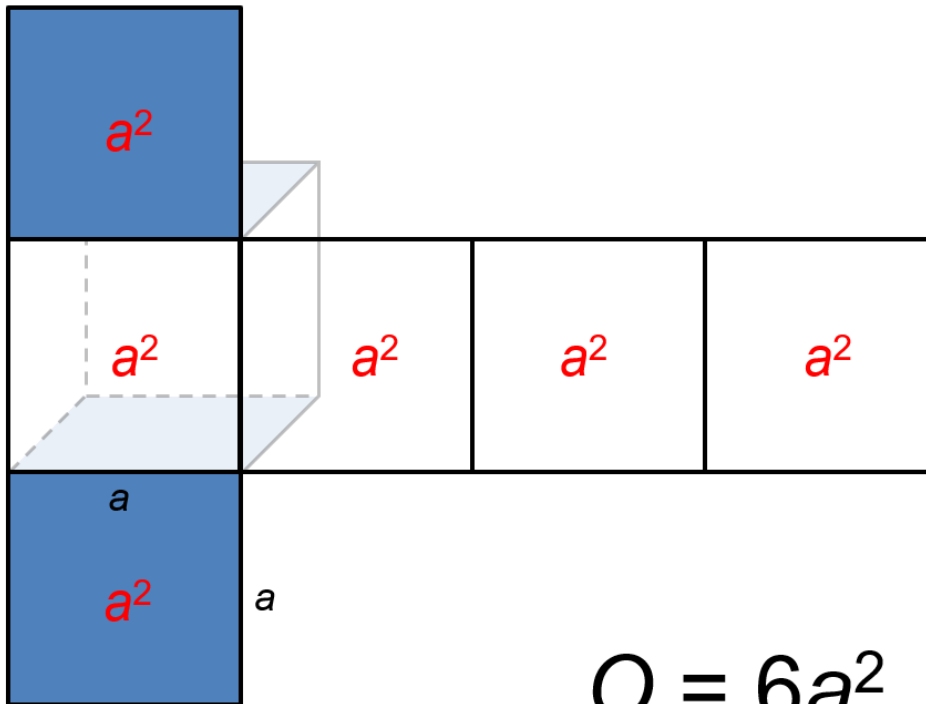
$$V = 18 \text{ dm}^3$$

KOCKA



$$V = B \cdot v$$

$$V = a^2 \cdot a = a^3$$



Primjer 2:

Izračunaj oplošje i volumen kocke brida $a = 5 \text{ m}$.

$$a = 5 \text{ m}$$

$$O = ? \quad V = ?$$

$$O = 6a^2$$

$$O = 6 \cdot 5^2,$$

$$O = 6 \cdot 25$$

$$O = 150 \text{ m}^2$$

$$V = a^3$$

$$V = 5^3$$

$$V = 125 \text{ m}^3$$

Riješite zadatke:

1. Zadatak 21., str. 127 (riješi samo prvi dio zadatka)
2. Zadatak 257., str 178
3. Zadatak 260., str 178

Kada sve prepišete i riješite zadane zadatke, komentirajte poruku na Teams-u u kanalu Matematike kako bih znala da ste sve riješili.

To bi bilo to za danas!

Vaša,

Maja B.