

## Kvadar i kocka – vježba

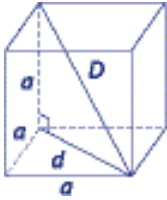
1. Izračunajte duljinu plošne i prostorne dijagonale kocke ako je duljina brida 6 cm.

$$a = 6 \text{ cm}$$

$$D, d = ?$$

$$d = a\sqrt{2}$$

$$D = a\sqrt{3}$$



2. Izračunajte duljinu brida kocke i duljinu prostorne dijagonale ako je duljina plošne dijagonale  $4\sqrt{2}$  cm.

$$d = 4\sqrt{2} \text{ cm}$$

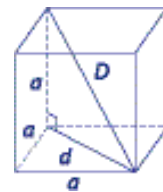
$$a, D = ?$$

$$d = a\sqrt{2}$$

$$4\sqrt{2} = a\sqrt{2} / : \sqrt{2}$$

$$a =$$

$$D = a\sqrt{3}$$



3. Izračunajte duljinu brida i duljinu plošne dijagonale kocke kojoj je duljina prostorne dijagonale  $2\sqrt{3}$  cm.

$$D = 2\sqrt{3} \text{ cm}$$

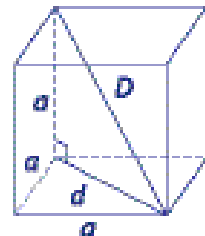
$$a, d = ?$$

$$D = a\sqrt{3}$$

$$2\sqrt{3} = a\sqrt{3}$$

$$a =$$

$$d = a\sqrt{2}$$



4. Izračunajte duljinu prostorne dijagonale kvadra kojemu su bridovi dugi 4 cm, 5 cm i 20 cm.

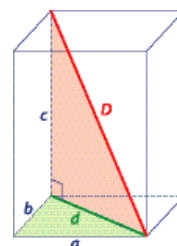
$$a = 4 \text{ cm}$$

$$b = 5 \text{ cm}$$

$$c = 20 \text{ cm}$$

$$D = ?$$

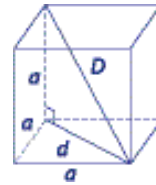
$$D = \sqrt{a^2 + b^2 + c^2}$$



5. Izračunajte oplošje kocke čiji je brid  $a = 4$  cm.

$$\underline{a = 4 \text{ cm}}$$
$$O = ?$$

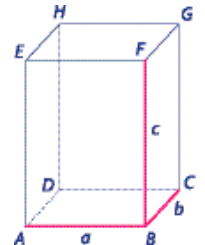
$$O = 6a^2$$



6. Izračunajte oplošje kvadra kojemu su zadane duljine bridova  $a = 2$  cm,  $b = 5$  cm i  $c = 12$  cm.

$$a = 2 \text{ cm}$$
$$b = 5 \text{ cm}$$
$$\underline{c = 12 \text{ cm}}$$
$$O = ?$$

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

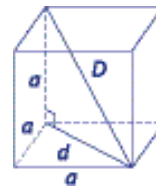


7. Izračunajte oplošje i obujam kocke kojoj je zadana duljina brida  $a = 4$  cm.

$$\underline{a = 4 \text{ cm}}$$
$$O, V = ?$$

$$O = 6a^2$$

$$V = a^3$$

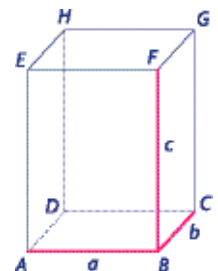


8. Izračunajte oplošje i obujam kvadra kojemu su zadane duljine bridova  $a = 2$  cm,  $b = 5$  cm i  $c = 12$  cm.

$$a = 2 \text{ cm}$$
$$b = 5 \text{ cm}$$
$$\underline{c = 12 \text{ cm}}$$
$$O, V = ?$$

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

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



Kada završiš s rješavanjem današnjih zadataka, **KOMENTIRAJ** moju današnju objavu u kanalu Matematika tako da napišeš **koji zadaci su ti bili najlakši, a koji najteži**. Ako trebaš pomoć, javi mi se

na Teamsu. 