

## **Učna ura dopolnilnega pouka za torek, 7.4. 2020 ( 9. razred)**

V tej uri reši nalogi, ki jih imaš pred seboj in preveri rešitve.

1. Izračunaj površino in prostornino pravilne 4-strane piramide z osnovnim robom 4 cm in višino 6 cm.
2. Izračunaj površino pravilne 4-strane piramide z osnovnim robom 8 cm in višino 12 cm.

Lep dan še naprej.

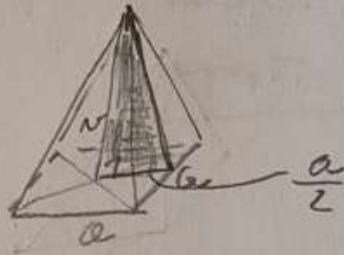
Marta Praprotnik

Rešitve imate na naslednji strani:

1. PRAVILNA 4-STRANA PIRAMIDA

$$a = 4 \text{ cm}$$
$$n = 6 \text{ cm}$$

$$P =$$
$$V =$$



$$P = W + pl$$

1)  $W = a^2$   
 $W = 4^2$   
 $W = 16 \text{ cm}^2$

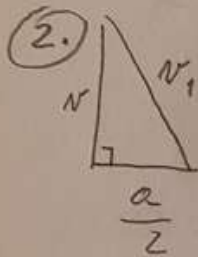
3)  $pl = 4 \cdot \frac{a \cdot N_1}{2}$

$$pl = 2 \cdot a \cdot N_1$$

$$pl = 2 \cdot 4 \cdot 2 \cdot \sqrt{10}$$

$$pl = 16 \cdot \sqrt{10} \text{ cm}^2$$

4)  $P = (16 + 16 \cdot \sqrt{10}) \text{ cm}^2$



$$N_1^2 = n^2 + \left(\frac{a}{2}\right)^2$$

$$N_1^2 = 6^2 + \left(\frac{4}{2}\right)^2$$

$$N_1^2 = 36 + 4$$

$$N_1 = \sqrt{40}$$

$$N_1 = 2 \cdot \sqrt{10} \text{ cm}$$

5)  $V = \frac{W \cdot n}{3}$

$$V = \frac{16 \cdot 6 \cdot 2}{3}$$

$$V = 32 \text{ cm}^3$$

2. PRAVILNA 4-STRANA PIRAMIDA

$$pl = 80 \text{ cm}^2$$

$$N_1 = 5 \text{ cm}$$

$\Delta$



$$pl = 4 \cdot \frac{a \cdot N_1}{2}$$

$$pl = 2 \cdot a \cdot N_1$$

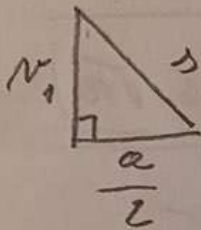
$$80 = 2 \cdot a \cdot 5$$

$$80 = 10 \cdot a$$

$$10 \cdot a = 80$$

$$a = 80 : 10$$

$$a = 8 \text{ cm}$$



$$\Delta^2 = N_1^2 + \left(\frac{a}{2}\right)^2$$

$$\Delta^2 = 5^2 + \left(\frac{8}{2}\right)^2$$

$$\Delta^2 = 25 + 16$$

$$\Delta = \sqrt{41}$$

$$\Delta = \underline{\underline{6,4 \text{ cm}}}$$