

6. teden 2. ura - Poprava nalog

$$\begin{array}{r} 192 \cdot 16 \\ 192 \\ \hline 1152 \\ \hline 3072 \end{array}$$

$$\begin{array}{r} 24 \cdot 24 \\ 48 \\ \hline 96 \\ \hline 576 \end{array}$$

1. naloga: PRAVILNA 4-strana PIRAMIDA

$N = 16 \text{ cm}$
 $a = 24 \text{ cm}$

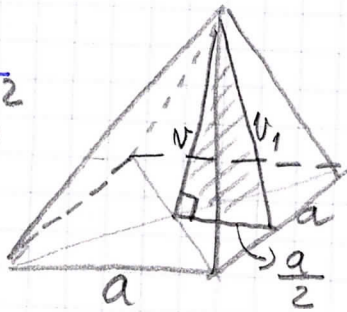
$P = 1536 \text{ cm}^2$

$V = 3072 \text{ cm}^3$

$\sigma = 576 \text{ cm}^2$

$pl = 960 \text{ cm}^2$

$N_1 = 20 \text{ cm}$



$P = \sigma + pl$

$P = 576 + 960$

$P = 1536 \text{ cm}^2$

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

$pl = \frac{4 \cdot 24 \cdot 20}{2}$

$pl = 960 \text{ cm}^2$

$\sigma = a^2$

$\sigma = 24^2$

$\sigma = 576 \text{ cm}^2$

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

$N_1^2 = 16^2 + 12^2$

$N_1^2 = 256 + 144$

$N_1^2 = 400$

$N_1 = 20 \text{ cm}$

$V = \frac{\sigma \cdot N}{3}$

$V = \frac{576 \cdot 16}{3}$

$V = 3072 \text{ cm}^3$

2. naloga

* PRAVILNA STIRISTRANA PIRAMIDA

$N = 10 \text{ m}$

$V = 30 \text{ m}^3$

$a = 3 \text{ m}$

$V = \frac{\sigma \cdot N}{3}$

$30 = \frac{\sigma \cdot 10}{3} \cdot 3$

$90 = \sigma \cdot 10$

$10\sigma = 90 \quad | :10$

$\sigma = 9 \text{ m}^2$

$\sigma = a^2$

$9 = a^2$

$a = \sqrt{9}$

$a = 3 \text{ m}$

3. naloga

PRAVILNA 6-STRANA PIRAMIDA

$s = 3,7 \text{ m}$

$a = 2,4 \text{ m}$

$pl = 25,2 \text{ m}^2$

$pl = 6 \cdot \frac{a \cdot N_1}{2}$

$pl = \frac{6 \cdot 2,4 \cdot 3,5}{2}$

$pl = 25,20 \text{ m}^2$

$N_1^2 = s^2 - \left(\frac{a}{2}\right)^2$

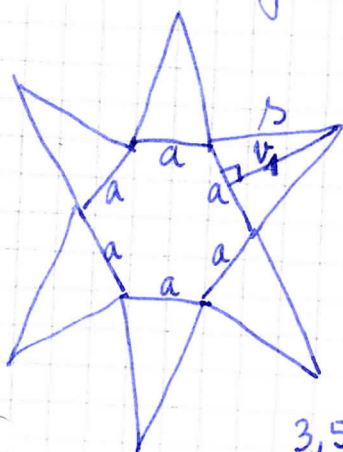
$N_1^2 = 3,7^2 - 1,2^2$

$N_1^2 = 13,69 - 1,44$

$N_1^2 = 12,25$

$N_1 = \sqrt{12,25}$

$N_1 = 3,5 \text{ m}$



$\frac{3,5 \cdot 3}{10,5}$

$\frac{10,5 \cdot 2,4}{210}$
 $\frac{420}{25,20}$

Odg: Potrebujemo najmanj $25,2 \text{ m}^2$ ploščine:

2N2 / str 143 / mol 40
 4. PRAVILNA 3-STRANA PIRAMIDA

$$P = 108\sqrt{3} \text{ cm}^2$$

$$\underline{pl} = 60\sqrt{3} \text{ cm}^2$$

$$V = 48\sqrt{3} \text{ cm}^3$$

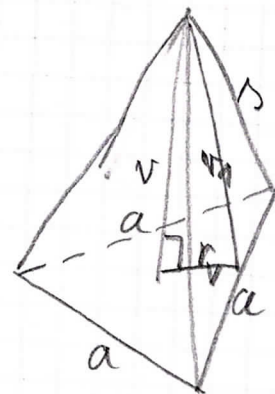
$$\sigma = 48\sqrt{3} \text{ cm}^2$$

$$v = 3 \text{ cm}$$

$$a = 8\sqrt{3} \text{ cm}$$

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

$$v_1 = 5 \text{ cm}$$



$$pl = 3 \cdot \frac{a \cdot l}{2}$$

$$1) \quad P = \sigma + pl$$

$$108\sqrt{3} = \sigma + 60\sqrt{3}$$

$$\sigma = 108\sqrt{3} - 60\sqrt{3}$$

$$\underline{\sigma = 48\sqrt{3}}$$

$$5) \quad N^2 = N_1^2 - r_v^2$$

$$N^2 = 5^2 - 4^2$$

$$N^2 = 25 - 16$$

$$N^2 = 9$$

$$\underline{N = 3 \text{ cm}}$$

$$3) \quad r_v = \frac{a\sqrt{3}}{6}$$

$$r_v = \frac{8\sqrt{3} \cdot \sqrt{3}}{6}$$

$$r_v = \frac{8 \cdot 3 \cdot 1 \cdot 4}{8 \cdot 2 \cdot 1}$$

$$\underline{r_v = 4 \text{ cm}}$$

$$2) \quad \sigma = \frac{a^2\sqrt{3}}{4}$$

$$48\sqrt{3} = \frac{a^2\sqrt{3}}{4} \cdot 4$$

$$192\sqrt{3} = a^2\sqrt{3}$$

$$a^2 = 192$$

$$a = \sqrt{192}$$

$$a = \sqrt{64 \cdot 3}$$

$$\underline{a = 8\sqrt{3} \text{ cm}}$$

$$4) \quad pl = 3 \cdot \frac{a \cdot v_1}{2}$$

$$60\sqrt{3} = \frac{3 \cdot 8\sqrt{3} \cdot v_1 \cdot 4}{2 \cdot 1}$$

$$60\sqrt{3} = 12\sqrt{3} \cdot v_1$$

$$12v_1 = 60 \quad | :12$$

$$\underline{v_1 = 5 \text{ cm}}$$

$$6) \quad V = \frac{\sigma \cdot v}{3}$$

$$V = \frac{48\sqrt{3} \cdot 3 \cdot 1}{3 \cdot 1}$$

$$\underline{V = 48\sqrt{3} \text{ cm}^3}$$