

REŠITVE: U str. 162/8, 10

8) Pravična 4-strana piramida

$a = 18\text{cm}$

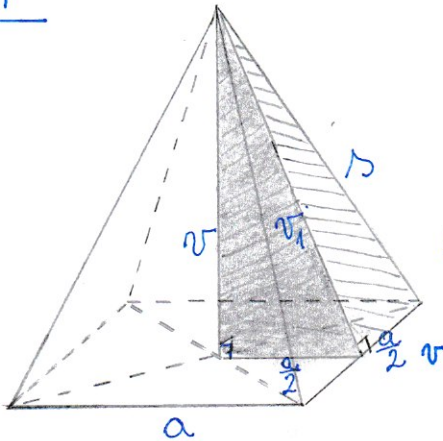
$v_1 = 15\text{cm}$

a) $P =$

b) $v =$

c) $V =$

č) $s =$



a) $v = a^2$

$v = 18^2$

$v = 324\text{cm}^2$

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

$pl = 2 \cdot a \cdot v_1$

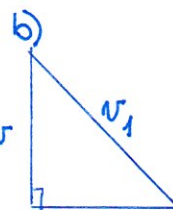
$pl = 2 \cdot 18 \cdot 15$

$pl = 540\text{cm}^2$

$P = v + pl$

$P = 324 + 540$

$P = 864\text{cm}^2$



$v^2 = v_1^2 - (\frac{a}{2})^2$

$v^2 = 15^2 - 9^2$

$v^2 = 225 - 81$

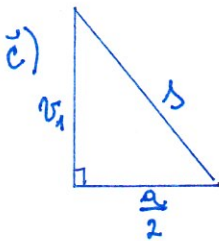
$v = \sqrt{144}$

$v = 12\text{cm}$

c) $V = \frac{v \cdot v}{3}$

$V = \frac{324 \cdot 12 \cdot 4}{3}$

$V = 1296\text{cm}^3$



$s^2 = v_1^2 + (\frac{a}{2})^2$

$s^2 = 15^2 + 9^2$

$s^2 = 225 + 81$

$s = \sqrt{306}$

$s = 17,5\text{cm}$

10) Pravična 4-strana piramida

$pl = 120\text{cm}^2$

$v_1 = 10\text{cm}$

a) $V =$

b) dolžina žice = ?

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

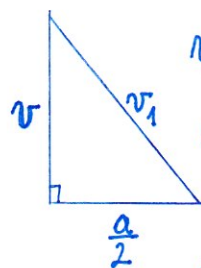
$pl = 2 \cdot a \cdot v_1$

$120 = 2 \cdot a \cdot 10$

$a = 120 : 20$

$a = 6\text{cm}$

$v = a^2$
 $v = 6^2$
 $v = 36\text{cm}^2$



$v_1^2 = v^2 + (\frac{a}{2})^2$

$v^2 = v_1^2 - (\frac{a}{2})^2$

$v^2 = 10^2 - 3^2$

$v^2 = 100 - 9$

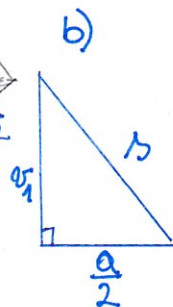
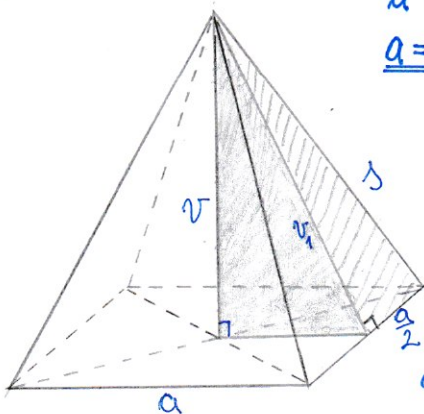
$v = \sqrt{91}$

$v = 9,5\text{cm}$

$V = \frac{v \cdot v}{3}$

$V = \frac{36 \cdot 9,5 \cdot 12}{3}$

$V = 114\text{cm}^3$



$s^2 = v_1^2 + (\frac{a}{2})^2$

$s^2 = 10^2 + 3^2$

$s^2 = 100 + 9$

$s = \sqrt{109}$

$s = 10,4\text{cm}$

DOLŽINA ŽICE:

$4 \cdot a + 4 \cdot s =$

$= 4 \cdot 6 + 4 \cdot 10,4 =$

$= 24 + 41,6 =$

$= 65,6\text{cm}$

REŠITVE: U str. 162/9

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1. PIRAMIDA A

$$S = 60 \text{ cm}^2$$

$$pL = 120 \text{ cm}^2$$

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

$$P =$$

$$V =$$

$$P = S + pL$$

$$P = 60 + 120$$

$$\underline{P = 180 \text{ cm}^2}$$

$$V = \frac{S \cdot n}{3}$$

$$V = \frac{60 \cdot 8 \cdot 20}{3}$$

$$\underline{V = 160 \text{ cm}^3}$$

2. PIRAMIDA B

$$S = 256 \text{ cm}^2$$

$$pL = 320 \text{ cm}^2$$

$$V = 512 \text{ cm}^3$$

$$n =$$

$$P =$$

$$P = S + pL$$

$$P = 256 + 320$$

$$\underline{P = 576 \text{ cm}^2}$$

$$V = \frac{S \cdot n}{3}$$

$$\frac{S \cdot n}{3} = V \quad | \cdot 3$$

$$S \cdot n = 3 \cdot V \quad | : S$$

$$n = \frac{3 \cdot V}{S}$$

$$n = \frac{3 \cdot 512 \cdot 2}{256 \cdot 1}$$

$$\underline{n = 6 \text{ cm}}$$

3. PIRAMIDA C

$$S = 484 \text{ cm}^2$$

$$n = 16 \text{ cm}$$

$$P = 3124 \text{ cm}^2$$

$$pL =$$

$$V =$$

$$P = S + pL$$

$$pL = P - S$$

$$pL = 3124 - 484$$

$$\underline{pL = 2640 \text{ cm}^2}$$

$$V = \frac{S \cdot n}{3}$$

$$V = \frac{484 \cdot 16}{3}$$

$$\underline{V \doteq 2581,3 \text{ cm}^3}$$