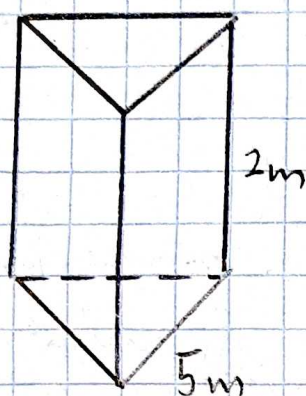


1



$$V = ?$$

$$V = \frac{25\sqrt{3}}{4} \cdot 2$$

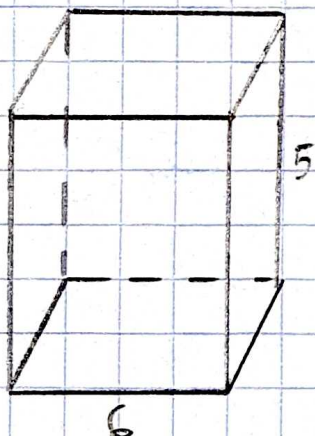
$$P_p = \frac{5^2\sqrt{3}}{4}$$

$$= \frac{25\sqrt{3}}{2} \text{ [m}^3\text{]}$$

$$= \frac{25\sqrt{3}}{2} \text{ [m}^2\text{]}$$

$$\text{Odp C } \frac{25\sqrt{3}}{2} \text{ [m}^3\text{]}$$

2



$$P_c = ?$$

$$P_b = 4 \cdot 5 \cdot 6$$

$$P_p = 6^2$$

$$= 120$$

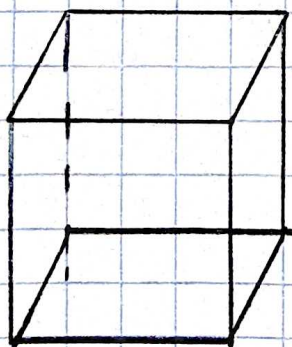
$$= 36$$

$$P_c = 6 \cdot 36 + 120$$

$$= 72 + 120$$

$$= \underline{192}$$

3



Wszystkie krawędzie - 12 cm

$$V = ?$$

$$V = \underline{1 \text{ cm}^3}$$

$$12 : 12 = 1 \text{ [cm}^2\text{]}$$

$$\text{Odp B } 1 \text{ cm}^3$$

4

a - przekatna ściany bocznej

b - krawędzie boczna

c - ~~krawędzie podstawy~~ przekatna ~~graniastupa~~ graniastupa

d - przekatna podstawy

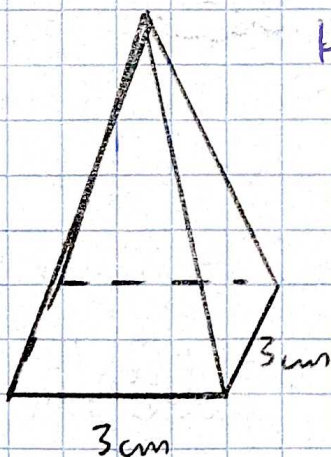
e - krawędzie podstawy

5

ostrosłup o podstawie ośmiokąta ma:

Odp D 16 krawędzi, 9 wierzchołków
i 9 ścian.

6



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

$$P_p = 3^2$$

$$V = ?$$

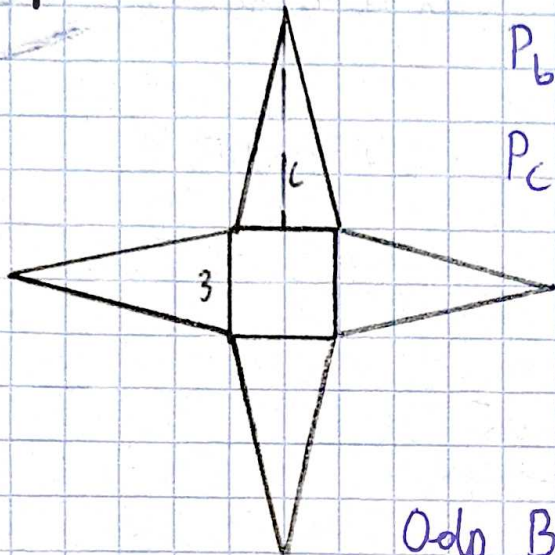
$$= 9 [\text{cm}^2]$$

$$V = \frac{1}{3} \cdot 9 \cdot 4$$

$$\text{Odp A } 12 \text{ cm}^3$$

$$= \underline{\underline{12 [\text{cm}^3]}}$$

7



$$P_b = ?$$

$$P_c = ?$$

$$P_b = 4 \cdot \frac{1}{2} \cdot 6 \cdot 3$$

$$= 36$$

$$P_p = 3^2$$

$$= 9$$

$$P_c = 9 + 36$$

$$= 45$$

Odp B $P_b = 36$ $P_c = 45$

8

Popręć wymiary: $30 \text{ cm} \times 0,6 \text{ m}$ - $30 \times 60 \text{ cm}$

czy poprzecznik starcey na delęjenie: $= 1800 \text{ cm}^2$

- seścianna o krawędzi 15 cm: TAK

$$P_{15} = 15^2$$

$$= 225 [\text{cm}^2]$$

$$P_c = 6 \cdot 225$$

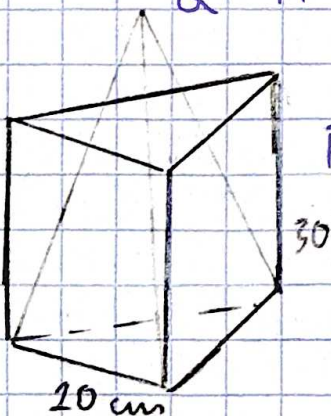
$$= 1350 [\text{cm}^2]$$

$$\begin{array}{r} 13 \\ 225 \\ - 6 \\ \hline 1350 \end{array}$$



$$1350 \text{ cm}^2 < 1800 \text{ cm}^2$$

- graniastupa prawidłowego trójkątnego NIE
a $H = 30 \text{ cm}$ i krawędzi podstawy 20 cm.



$$P_p = \frac{20^2 \sqrt{3}}{4}$$

$$= 100 \sqrt{3} [\text{cm}^2]$$

$$P_b = 3 \cdot 30 \cdot 20$$

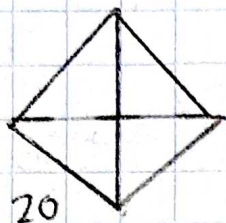
$$= 1800$$

$$P_c = 2 \cdot 100 \sqrt{3} + 1800$$

$$= 200 \sqrt{3} + 1800$$

$$200 \sqrt{3} + 1800 [\text{cm}^2] > 1800 \text{ cm}^2$$

• oktosiánam foremny a kőszéle 20 cm TAK



$$P_p = \frac{20^2 \sqrt{3}}{4}$$

$$= 100 \sqrt{3} \text{ [cm}^2\text{]}$$

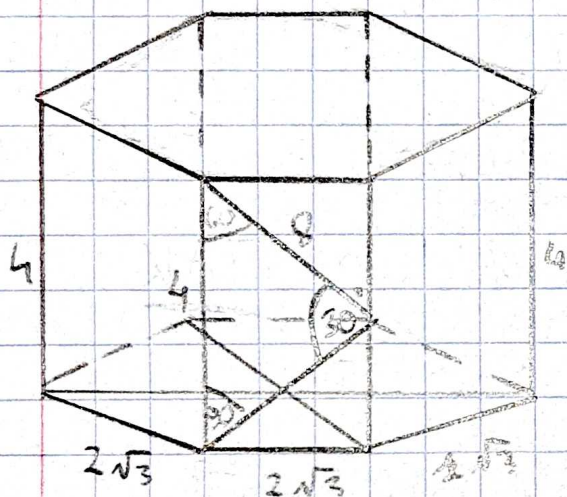
$$P_c = 4 \cdot 100 \sqrt{3}$$

$$= 400 \sqrt{3} \text{ [cm}^2\text{]}$$

$$\underline{400 \sqrt{3} \text{ km}^2 < 1800 \text{ cm}^2}$$

$$\approx 693$$

9



$$V = ? \quad \text{kr. podet} = 4 \sqrt{3} : 2$$

$$= 2 \sqrt{3}$$

$$P_{1\Delta} = \frac{(2\sqrt{3})^2 \sqrt{3}}{4}$$

$$= 3 \sqrt{3}$$

$$P_p = 6 \cdot 3 \sqrt{3}$$

$$= 18 \sqrt{3}$$

$$V = 18 \sqrt{3} \cdot 4$$

$$2a = 8 \quad | :2$$

$$a = 4$$

$$= \underline{42 \sqrt{3}}$$

