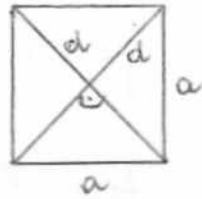


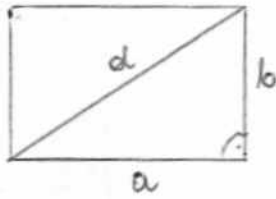
Figury płaskie

1. Kwadrat



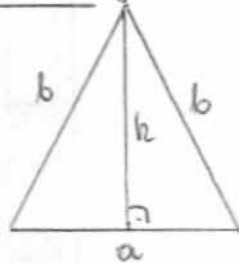
$$d = a\sqrt{2}$$
$$P = a^2$$
$$Obw = 4a$$

2. Prostokąt



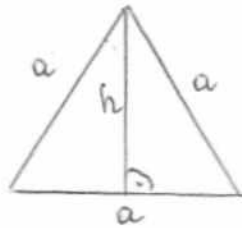
$$d = \sqrt{a^2 + b^2}$$
$$P = a \cdot b$$
$$Obw = 2a + 2b$$

3. Trójkąt równoboczny



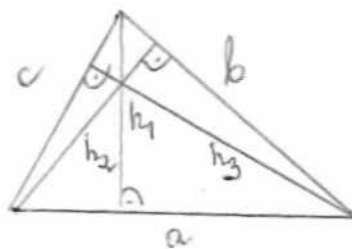
$$Obw = a + 2b$$
$$P = \frac{1}{2} a \cdot h$$

Trójkąt równoboczny



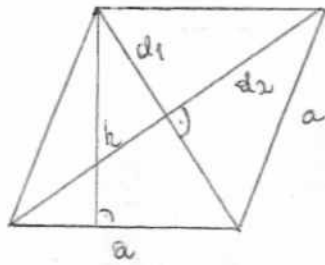
$$Obw = 3a$$
$$P = \frac{a^2\sqrt{3}}{4}$$
$$h = \frac{a\sqrt{3}}{2}$$

Trójkąt dowolny



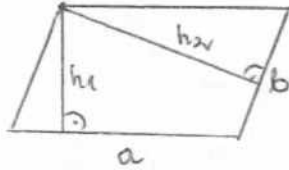
$$Obw = a + b + c$$
$$P = \frac{1}{2} a \cdot h_1 = \frac{1}{2} b \cdot h_2 = \frac{1}{2} c \cdot h_3$$

4. Domb



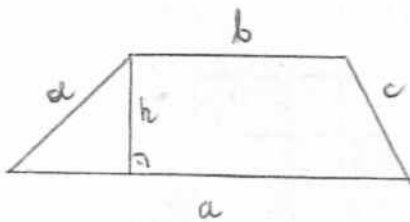
$$p = a \cdot h$$
$$p = \frac{1}{2} d_1 \cdot d_2$$
$$Obu = 4a$$

5. Döntőleghőbök



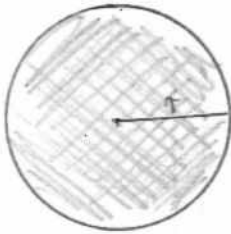
$$p = a \cdot h_1 = b \cdot h_2$$
$$Obu = 2a + 2b$$

6. Trapez



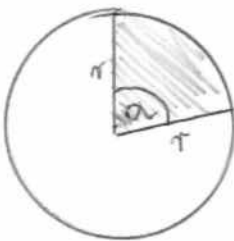
$$Obu = a + b + c + d$$
$$P = \frac{1}{2} \cdot (a + b) \cdot h$$

7. Kóro



$$Obu = 2\pi r$$
$$P = \pi r^2$$

8. Hírcsüvel kóromy



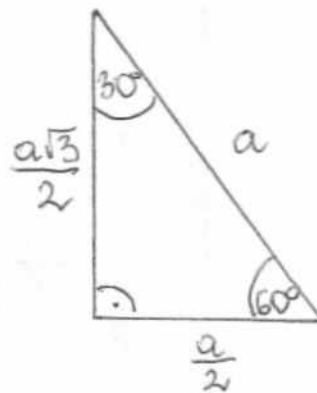
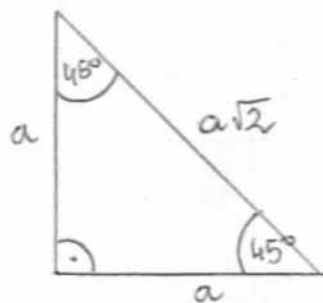
$$P_H = \frac{\alpha}{360^\circ} \cdot \pi r^2$$

9. Hírcsüvel kóromy



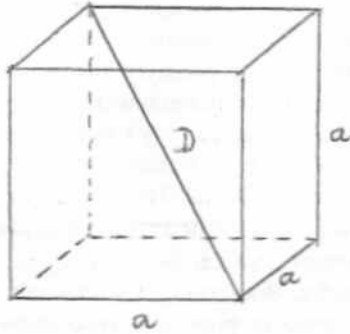
$$P = \pi R^2 - \pi r^2$$

Zależności w trójkącie



Gramiastopiny

1. Sześcian



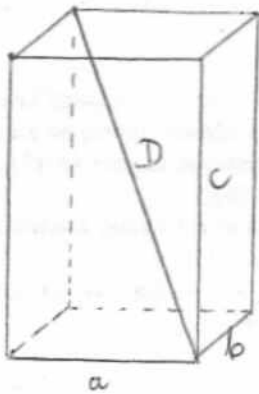
$$D = a\sqrt{3}$$

$$P_p = a^2$$

$$P_c = 6a^2$$

$$V = a^3$$

2. Prostopadłościan



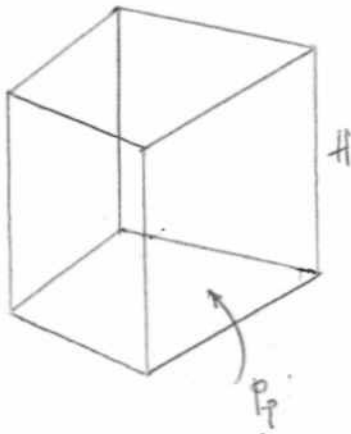
$$D = \sqrt{a^2 + b^2 + c^2}$$

$$P_p = ab$$

$$P_c = 2ab + 2bc + 2ac$$

$$V = abc$$

3. Ławka

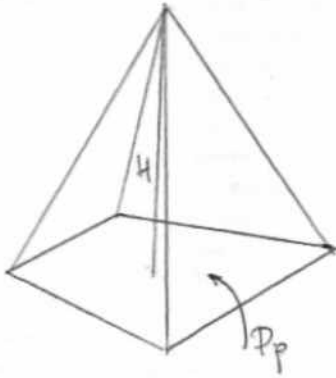


$$P_c = 2 \cdot P_p + P_b$$

$$V = P_p \cdot H$$

Ostrosiemy

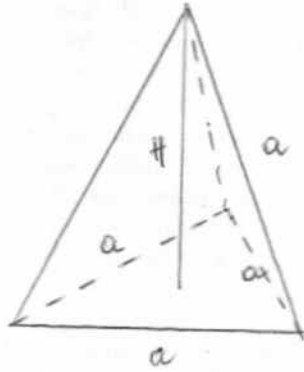
1. Dvohhny



$$P = P_p + P_b \quad [j^2]$$

$$V = \frac{1}{3} P_p \cdot H \quad [j^3]$$

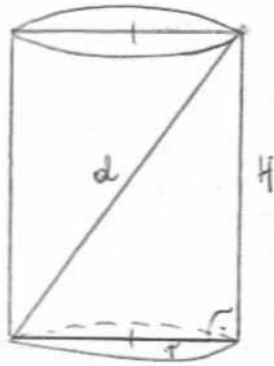
2. Shtroscian formyny



$$P = \frac{1}{2} \cdot \frac{a^2 \sqrt{3}}{1} = a^2 \sqrt{3}$$

Bryły obrotowe

1. Walec



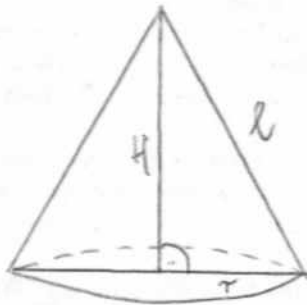
$d = \sqrt{H^2 + r^2}$ - przeciwokątna walca

$$P_b = 2\pi r H \quad [j^2]$$

$$P_c = 2\pi r^2 + 2\pi r H \\ = 2\pi r (r + H) \quad [j^2]$$

$$V = \pi r^2 \cdot H \quad [j^3]$$

2. Stożek



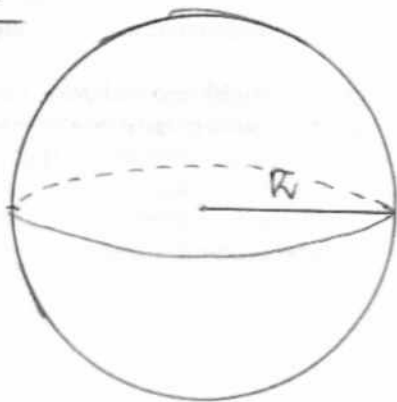
$$H^2 + r^2 = l^2$$

$$P_b = \pi r l \quad [j^2]$$

$$P_c = \pi r^2 + \pi r l \\ = \pi r (r + l) \quad [j^2]$$

$$V = \frac{1}{3} \pi r^2 \cdot H \quad [j^3]$$

3. Kula



$$P = 4\pi R^2 \quad [j^2]$$

$$V = \frac{4}{3} \pi R^3 \quad [j^3]$$