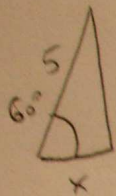
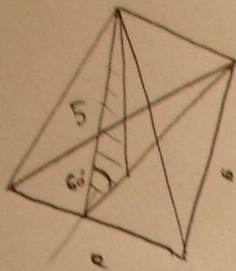


ZAD 3

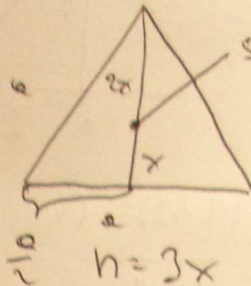
$$P_{\text{pole. celn}} = P_{\text{podst}} + 3 P_{\Delta \text{bok}}$$



$$\cos 60^\circ = \frac{x}{5}$$

$$x = 5 \cos 60^\circ = \frac{5}{2}$$

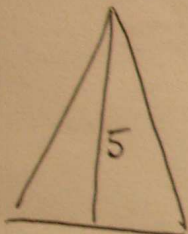
PODSTAWA



ŚRODEK WYSOKOŚCI
DZIELI WYSOKOŚĆ PODSTAWY
W PROPORCJACH 2:1

$$h = 3 \cdot \frac{5}{2} = \frac{15}{2}$$

~ TW. PITAGORASA



$$e = 5\sqrt{3}$$

$$P_{\Delta \text{bok}} = \frac{1}{2} \cdot 5\sqrt{3} \cdot 5 = \frac{25\sqrt{3}}{2}$$

$$e^2 - \frac{e^2}{4} = h^2$$

$$\frac{3e^2}{4} = \left(\frac{15}{2}\right)^2$$

$$\frac{3e^2}{4} = \frac{225}{4} \quad : \frac{3}{4}$$

$$e^2 = \frac{225}{3} = \frac{75}{1}$$

$$e^2 = 75$$

$$e = \sqrt{75} = 5\sqrt{3}$$

$$P_{\text{podst}} = \frac{e^2 \sqrt{3}}{4} = \frac{(5\sqrt{3})^2 \cdot \sqrt{3}}{4} =$$

$$= \frac{75\sqrt{3}}{4}$$

$$P_{\text{pole. celn}} = \frac{75\sqrt{3}}{4} + 3 \cdot \frac{25\sqrt{3}}{2} =$$

$$= \frac{75\sqrt{3}}{4} + \frac{150\sqrt{3}}{2} = \frac{225\sqrt{3}}{4}$$