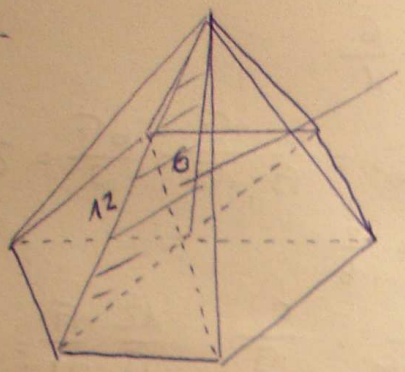
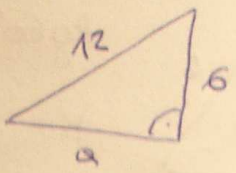
ZAD d





2 TW. PITAGORASA

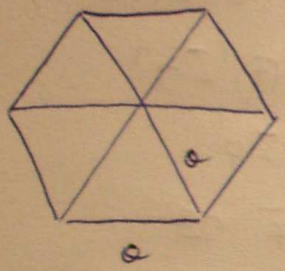
$a^2 = 12^2 - 6^2$

$a^2 = 144 - 36$

$a^2 = 108$

$a = \sqrt{108} = 6\sqrt{3}$

PODSTAWA



$P_{prost} = 6 \cdot P_{\triangle równob.}$

$P_{\triangle równob.} = \frac{a^2\sqrt{3}}{4} =$

$= \frac{(6\sqrt{3})^2 \cdot \sqrt{3}}{4} =$

$= \frac{108\sqrt{3}}{4} = 27\sqrt{3}$

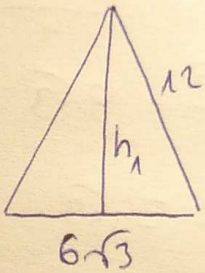
$P_{prost} = 6 \cdot 27\sqrt{3} = 162\sqrt{3}$

$V = \frac{1}{3} P_{prost} \cdot 6 = \frac{1}{3} \cdot 162\sqrt{3} \cdot 6^2 =$

$= 324\sqrt{3}$

OK

TRÓJKĄT BOCZNY



2 TW. PITAGORASA

$h_1^2 = 12^2 - (3\sqrt{3})^2$

$h_1^2 = 144 - 27$

$h_1 = \sqrt{117} = 3\sqrt{13}$

$P_{\triangle boczn} = \frac{1}{2} \cdot 6\sqrt{3} \cdot 3\sqrt{13} = 9\sqrt{39}$

$P_{CAŁK} = P_{prost} + 6 P_{\triangle boczn} =$

$= 162\sqrt{3} + 6 \cdot 9\sqrt{39} =$

$= 162\sqrt{3} + 54\sqrt{39} =$

$= 54\sqrt{3}(3 + \sqrt{13})$