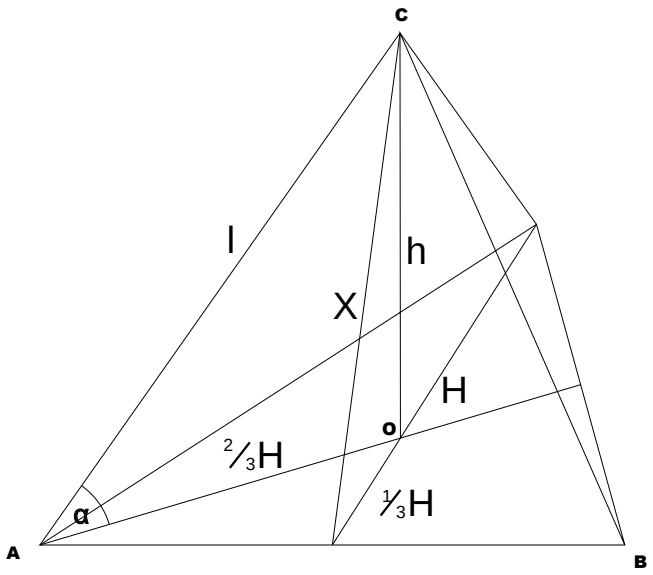


Dane:a,α  Szukane: $V=\frac{1}{3}P_{P*}h$ ,$P_B=3*P\Delta\ ABC$

H/a=sin60  wiec  $H=\frac{a\sqrt{3}}{2}$  2/3 $H=\frac{a\sqrt{3}}{3}$

$h/\frac{a\sqrt{3}}{3}=tg\alpha$  wiec  $h=tg\alpha*\frac{a\sqrt{3}}{3}$

$P_P=\frac{1}{2}a*H-\frac{1}{2}a*\frac{a\sqrt{3}}{2}=\frac{a^2\sqrt{3}}{4}$  $V=\frac{1}{3}*\frac{a^2\sqrt{3}}{4}*tg\alpha*\frac{a\sqrt{3}}{3}=\frac{a^3\,tg\alpha}{12}$

$P\Delta ABC=\frac{aX}{2}$ ,$X^2=H^2/9+h^2$ skad $X^2=a^2/12+3a^2tg^2\alpha/9=\frac{a^2(1+4tg^2\propto)}{12}$

$X=\frac{a\sqrt{1+4tg^2\propto}}{2\sqrt{3}}$  $P\Delta ABC=1/2*a*X=\frac{a^2}{4\sqrt{3}}\sqrt{1+4tg^2\propto}$

$P_B=3P\Delta ABC=3*\frac{a^2}{4\sqrt{3}}\sqrt{1+4tg^2\propto}$