

4.5  
6

$AB = a$  (no)

$AD = a \tan \frac{\alpha}{2}$

$BD = AC = a \sqrt{1 + \tan^2 \frac{\alpha}{2}} = \frac{a}{\cos \frac{\alpha}{2}}$

$c'c = AC \tan \beta = \frac{a \tan \beta}{\cos \frac{\alpha}{2}}$

$V = AB \cdot BC \cdot c'c = a \cdot a \tan \frac{\alpha}{2} \cdot \frac{a \tan \beta}{\cos \frac{\alpha}{2}} = \frac{a^3 \sin \frac{\alpha}{2} \cdot \tan \beta}{\cos^2 \frac{\alpha}{2}}$

$a = \sqrt[3]{\frac{V \cos^2 \frac{\alpha}{2}}{\sin \frac{\alpha}{2} \tan \beta}} \Rightarrow c'c = \sqrt[3]{\frac{V \cos^2 \frac{\alpha}{2}}{\sin \frac{\alpha}{2} \tan \beta}} \cdot \frac{\tan \beta}{\cos \frac{\alpha}{2}} =$

$= \sqrt[3]{\frac{V \cos^2 \frac{\alpha}{2} \cdot \tan^3 \beta}{\sin \frac{\alpha}{2} \tan \beta \cos^2 \frac{\alpha}{2}}} = \sqrt[3]{\frac{V}{\sin \frac{\alpha}{2} \cos^2 \frac{\alpha}{2} \tan \beta}}$

$= \sqrt[3]{\frac{V}{\frac{1}{2} \sin \alpha \tan \beta}} = \sqrt[3]{\frac{2V}{\sin \alpha \tan \beta}}$