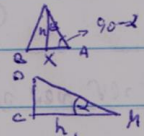
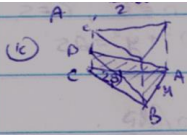


3.76
5



$$S_{ABC} = \frac{x^2 \cot^2 \beta}{2 \sin(2\beta)} = \frac{x^2 \cot^2 \beta}{4 \sin^2 \beta} = \frac{xh}{2} \rightarrow h = \frac{x}{2} \cot \beta$$

$$DC = h \tan \alpha = \frac{x}{2} \tan \alpha \cot \beta$$

$$V = \frac{1}{3} \cdot \frac{x^2 \cot^2 \beta}{4 \sin^2 \beta} \cdot \frac{x}{2} \tan \alpha \cot \beta \rightarrow x = \sqrt[3]{\frac{24V \tan^2 \beta \cot \alpha}{\cos \alpha}}$$

$$S_{ABD} = \frac{DA \cdot BA}{2} = \frac{x \cdot \frac{h}{\cos \alpha}}{2} = \frac{xh}{2 \cos \alpha} = \frac{x^2 \cot \beta}{4 \cos \alpha} = \frac{\sqrt[3]{(24V \tan^2 \beta \cot \alpha)^2}}{4 \cos \alpha}$$