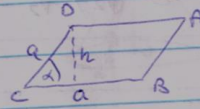
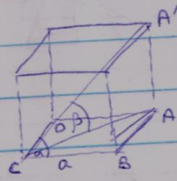
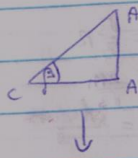


4.20  
6



$$h = a \sin \alpha$$
$$S_{ABCD} = a^2 \sin \alpha$$



$$\frac{AC}{\sin(180^\circ - \alpha)} = \frac{AB}{\sin \frac{\alpha}{2}}$$
$$AC = \frac{a \sin \alpha}{\sin \frac{\alpha}{2}} = 2a \cos \frac{\alpha}{2}$$

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

$$V = S_{ABCD} \cdot A'A = 2a \cos \frac{\alpha}{2} \tan \beta \cdot a^2 \sin \alpha = 4a^3 \cos^2 \frac{\alpha}{2} \sin \frac{\alpha}{2} \tan \beta$$