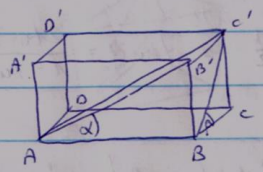
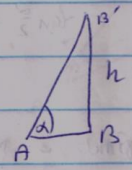
4.17
6



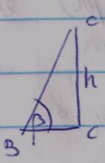
$\Delta ABB'$



$\frac{h}{AB} = \tan\alpha$

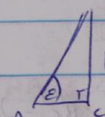
$AB = \frac{h}{\tan\alpha}$

$\Delta BCc'$



$\frac{c'c}{BC} = \tan\alpha \rightarrow BC = \frac{h}{\tan\beta}$

$\Delta ACc'$



$AC = \sqrt{AB^2 + BC^2} = \sqrt{h^2\left(\frac{1}{\tan^2\alpha} + \frac{1}{\tan^2\beta}\right)}$

$= h\sqrt{\frac{\tan^2\alpha + \tan^2\beta}{\tan^2\alpha \tan^2\beta}}$

$\cot\varepsilon = \frac{AC}{h} = \sqrt{\frac{\tan^2\alpha + \tan^2\beta}{\tan^2\alpha \tan^2\beta}} = \sqrt{\cot^2\alpha + \cot^2\beta}$