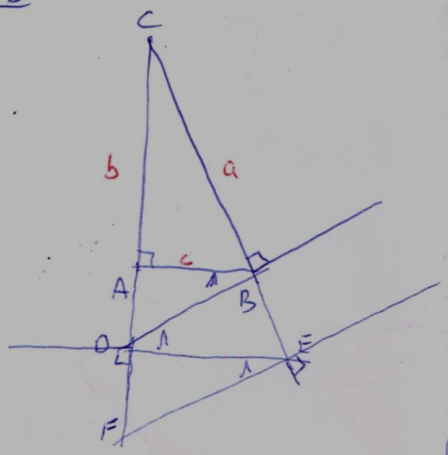
1.45
6




~~$\angle C = \alpha$~~ (NO)

$\rightarrow \angle B_1 = \alpha$

(SS) $\triangle ABD \sim \triangle ACB$

$OA = \frac{c^2}{b}$ $\quad OB = \sqrt{c^2 + \frac{c^4}{b^2}} = c\sqrt{\frac{b^2+c^2}{b^2}} = \frac{ca}{b}$

$\angle D_1 = \alpha$

(S·S) $\triangle DBE \sim \triangle BAD$

$\frac{OB}{AB} = \frac{BE}{OA} = \frac{DE}{OB} \rightarrow DE = \frac{c^2 a^2}{b^2 c} = \frac{ca^2}{b^2}$

$\angle E_1 = \alpha$

(SS) $\triangle DEF \sim \triangle ACB$

$\boxed{\frac{DE}{CA} = \frac{ca^2}{b^3}}$