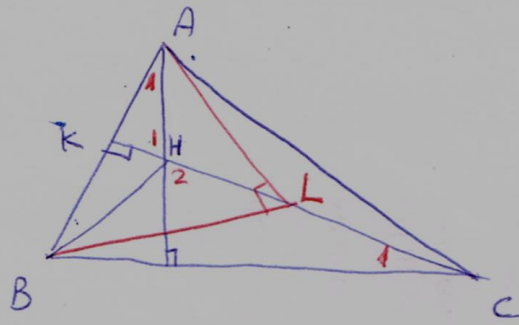


1.93
S



$\angle C = \alpha \leftarrow 90 - \alpha = \angle KH_1 = \angle KH_2 \leftarrow \angle A_1 = \alpha$ (NOJ)
(S.S) $\triangle AKH \sim \triangle CKB$

$$\frac{AK}{KC} = \frac{KH}{KB} \Rightarrow AK \cdot KB = KC \cdot KH$$

$$S_1 = KC \cdot AB$$

$$S_2 = KH \cdot AB$$

$KL^2 = AK \cdot BK$ (power of point K relative to the circle with diameter AB, which is the circumcircle of the orthic triangle)

$$S_1 \cdot S_2 = KC \cdot AB \cdot KH \cdot AB = AB^2 \cdot KC \cdot KH = AB^2 \cdot AK \cdot BK =$$

$$= AB^2 \cdot KL^2 = (AB \cdot KL)^2$$

$$S_{AB2} = KL \cdot AB = \sqrt{S_1 \cdot S_2}$$