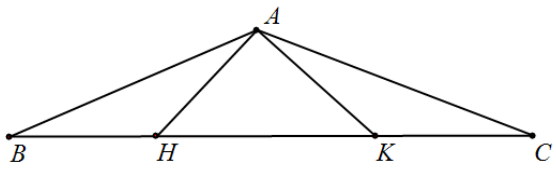

Example 122 : As shown in Figure 3, △in ABC, ∠BAC is a pure angle , and the perpendicular bisectors of AB and AC intersect BC at H and K. Prove that $\angle HAK$ = 2 ∠BAC -180° .

$$\frac{\left(\frac{A-C}{A-B}\right)^2}{\frac{A-K}{A-H}}=-\frac{\frac{A-C}{A-K}\frac{B-C}{B-A}}{\frac{C-B}{C-A}\frac{A-B}{A-H}}$$

Explanation: Note that the right side of the equation is a negative real number.