



It can be seen from the identity that the three points P , Q , and T are collinear $\Leftrightarrow FC \perp FA$. $FC \perp FA$ does not require F to be on AB , it only needs to let F be on the circle whose diameter is AC .

It can be seen from the identity equation that the three points P , Q , T are collinear and the angle between \Leftrightarrow the straight lines CB and HA is equal to the angle between the straight lines AB and FC . Therefore, a new proposition can be obtained:

Example 70 : As shown in the figure, there are two points F and H on the $\triangle ABC$ plane, satisfying that the angle between the straight lines CB and HA is equal to the angle between the straight lines AB and FC . The feet of F on AC , AH , BC are P , Q , T respectively. Prove: P , Q , T are collinear.

