Example 121 : As shown in Figure 3, $\triangle ABC$, extend BA to D, and the bisectors of $\angle CAB$ and $\angle CA$ D intersect the straight line BC at P and Q. If $AP = AQ$, prove that $\angle ACB - \angle ABC = 90°$.

$$\left(\frac{\frac{C-B}{C-A}}{\frac{B-A}{B-C}}\right)^2 = -\frac{\frac{A-P}{A-B}}{\frac{A-C}{A-P}}\frac{\frac{Q-A}{A-C}}{\frac{B-A}{Q-A}}\left(\frac{\frac{C-B}{P-A}}{\frac{Q-A}{B-C}}\right)^2,$$