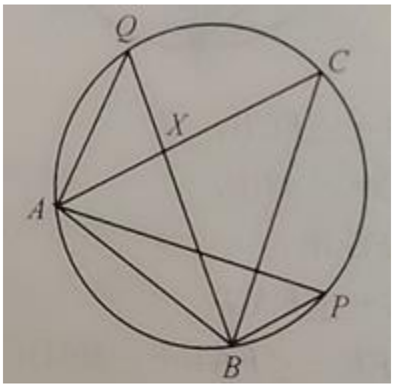

Example 1 92 : As shown in Figure 1 , *in* $\triangle ABC$, the high line $\triangle$passing through point A *intersects* the circumscribed circle *of* ABC at point P, X is a point on the line segment AC , and BX intersects the circle at Q. Proof: The necessary and sufficient condition for $BX= CX$ *is* PQ is the diameter of the circumscribed circle. (2003 British Mathematics Contest Questions)

$$\frac{\frac{B-C}{B-P}}{\frac{A-C}{A-P}}\frac{\frac{B-Q}{B-C}}{\frac{C-B}{C-A}}\frac{C-B}{A-P}\frac{B-P}{Q-B}=1,$$