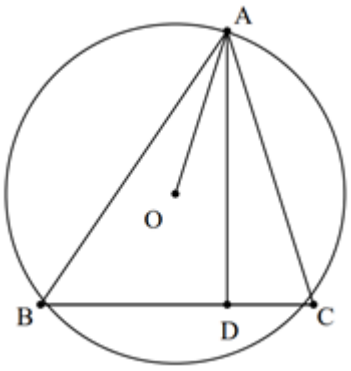

Example 66 : As shown in Figure 3, in $\triangle ABC$, O is the circumcenter, AD is high, $AB > AC$, to prove: $\angle C = \angle B + \angle DAO$.

Proof: $\dfrac{\dfrac{A-D}{A-O}\dfrac{B-A}{B-C}}{\dfrac{C-B}{C-A}} = \dfrac{A-D}{B-C}\left(\dfrac{B-A}{B-C}\dfrac{A-C}{A-O}\right)$.

Explain $\dfrac{B-A}{B-C}\dfrac{A-C}{A-O}$ that $\angle B + \angle CAO = 90^\circ$._See Zhou Gaozhang p 149