



Example 184 : As shown in Figure 1 , in $\triangle ABC$, D and E are respectively on CB and its extension line, $AD = AE$, $\angle BAD = \angle CAD$, $AD \perp AE$, to prove:

$$\angle B - \angle C = \frac{\pi}{2}.$$

Proof: $A=0$, $\frac{\frac{B}{C-B}}{\frac{C}{B}} = \frac{\frac{C}{D} \frac{E}{C-B} \frac{D}{E}}{\frac{D}{B} \frac{B-C}{D}}$.

In $\triangle ABC$, D and E are respectively on CB and its extension line. Prove: $AD = AE$, $\angle BAD = \angle CAD$, $\angle B - \angle C = \angle EAD$, if any two of these three conditions are known, we can get The third was established.