



$$\triangle ABD \sim \triangle BAC \iff \angle C_1 = \angle D_1 \quad \text{v.c.}$$

$$\iff \angle ABD = \angle CAB$$

$$\angle DAB = \angle ABC$$

על כן, היתרון של היתרון  
אילו, אילו, אילו, אילו

$$\implies AC = BD$$

$$DE = EC \iff \begin{matrix} AC = DB \\ AE = EB \end{matrix}$$

$$\widehat{BC} = \widehat{AD} + \widehat{DT} \implies \widehat{DT} = \widehat{TC} \iff \widehat{DT} = \widehat{TC}$$

$$\angle BDC = 40^\circ \iff \widehat{AD} = 80^\circ \iff \widehat{AD} + \widehat{BC} = 160^\circ \iff \widehat{AD} = \widehat{BC} \iff AD = BC$$

DIECT