



Example 44 : As shown in the figure, in $\triangle ABC$, D is the midpoint of AB , E is the midpoint of BD , and the circumscribed circle of $\triangle ACE$ intersects CB at F . Prove: $\angle DCA = \angle EFD$.

$$\text{Suppose } C = 0, \quad F = kB, \quad 4 - 4 \frac{\frac{C - \frac{A+B}{2}}{F - \frac{A+3B}{4}} + (2k-1) \frac{\frac{C-B}{F - \frac{A+3B}{4}}}{\frac{A-C}{A-B}}} = 0,$$