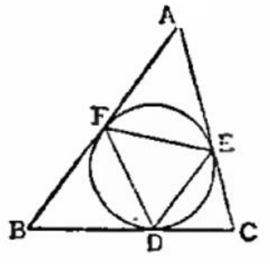

Example 1 46 : As shown in Figure 3, $\triangle$the inscribed circles of *ABC intersect* BC, CA, *AB respectively* at D, E, F, to prove: $2\angle FDE = \angle B + \angle C$.

Proof: $\dfrac{\dfrac{B-A}{B-C}\dfrac{C-B}{C-A}}{\left(\dfrac{D-F}{D-E}\right)^2} = \dfrac{\dfrac{C-B}{D-F}}{\dfrac{F-D}{A-B}} \dfrac{\dfrac{D-E}{B-C}}{\dfrac{A-C}{E-D}}$.

Compared with the traditional proof method :

$\angle B + \angle C = 180^\circ - 2\angle BDF + 180^\circ - 2\angle EDC$

$= 2(180^\circ - \angle BDF - \angle EDC) = 2\angle FDE$, Do you feel that there is something in common?