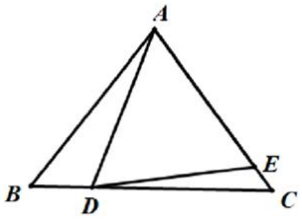
Example 1 34 : As shown in the figure, in $\triangle ABC$, $AB = AC$, point D is on BC, point E is on AC, and $AD = AE$. Prove: $2\angle EDC = \angle DAB$.



$$\frac{\left(\frac{D-E}{B-C}\right)^2}{\frac{A-D}{A-B}} = \frac{\frac{B-A}{B-C}\frac{E-D}{C-A}}{\frac{C-B}{C-A}\frac{D-A}{D-E}},$$