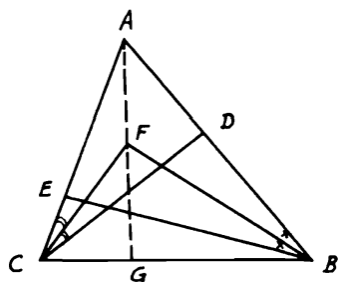


1.2. *ABC is a triangle. D and E are any two points on AB and AC. The bisectors of the angles ABE and ACD meet in F. Show that $\angle BDC + \angle BEC = 2 \angle BFC$.*

Example 1 85 : As shown in Figure 1, in $\triangle ABC$, D and E are points on AB and AC respectively, and the angle bisectors of $\angle ABE$ and $\angle ACD$ intersect at F. Prove: $\angle BDC + \angle BEC = 2 \angle BFC$.



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