

**Example 1 41:** As shown in the figure, in  $\triangle$  ABC, CD is the angle bisector, E is the circumcenter of  $\triangle$  ABC, through C, do  $CF \perp CE$ , through D, do  $DF /\!\!/ AC$ , and prove:  $CD /\!\!/ FB$ .

$$\frac{C-D}{F-B}\frac{D-F}{A-C}\frac{\frac{C-B}{C-D}}{\frac{C-D}{C-A}}\frac{\frac{F-B}{F-D}}{\frac{C-B}{C-D}}=1,$$

Explanation: From  $\angle$  FCB =  $\angle$  CAB =  $\angle$  FDB, then the four points F, C, D, B are in a circle,  $\angle$  BFD =  $\angle$  BCD.