



Example 1 69 : As shown in Figure 1, in the acute angle $\triangle ABC$, the bisector of $\angle ACB$ intersects AB at point D , passes through \triangle the circumcenter O of ABC , draws a perpendicular line from CD , intersects AC at point E , and passes through point E to draw parallel to AB The line intersects CD at point F . Prove: C, E, O, F are four points in a circle. (2010 Fujian Provincial Preliminaries)

$$\frac{\frac{F-E}{D-C}}{\frac{O-E}{O-C}} = \frac{\frac{C-B}{C-D}}{\frac{C-D}{C-A}} \frac{E-F}{A-B} \left(\frac{D-C}{O-E} \frac{C-O}{C-A} \right) \frac{B-A}{B-C}.$$