

Example 131: As shown in Figure 3, let the extended lines of sides AD and BC of the inscribed quadrilateral ABCD intersect at point G, AC and BD intersect at point E, and the bisector of AGB passing through E intersect BD and AC at F and K, Prove: EF = EK.

$$\frac{\frac{B-D}{K-G}}{\frac{G-K}{C-A}} = \frac{\frac{C-B}{G-K}}{\frac{G-K}{D-A}} \frac{\frac{D-B}{D-A}}{\frac{C-B}{C-A}}.$$