

remove circle

Example 2 28: As shown in the figure, in \triangle ABC, O is the circumcenter, the straight lines XY and ZY are symmetrical about AB, the straight lines ZY and ZK are symmetrical about BC, and the straight lines KZ and KS are symmetrical about CA. Prove that the straight line KS is symmetrical about AO and XY parallel.

$$\frac{A-O}{\frac{X-Y}{S-K}} = \frac{A-O}{\frac{A-B}{B-A}} \frac{C-B}{\frac{C-O}{B-O}} \frac{B-A}{\frac{Y-X}{A-C}} \frac{Z-K}{\frac{B-C}{K-Z}} \frac{A-C}{\frac{K-Z}{A-O}},$$

Try changing it to an inscribed circle