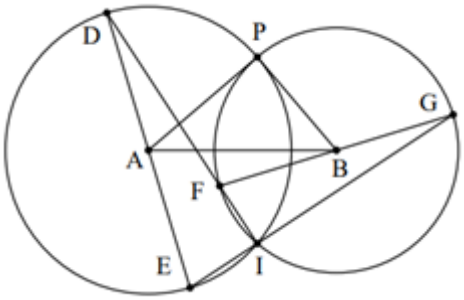

Example 89 : As shown in Figure 3, circle A intersects circle B at two points P and I, and $PA \perp PB$, D is a point on circle A, D and E are symmetrical about A, DI intersects circle B at F, and EI intersects circle B at G, if G is on FB, then $FG \perp DE$.

$$\frac{F-G}{E-D}=\frac{G-I}{I-D}\frac{F-G}{B-G}\left(\frac{I-B}{G-I}/\frac{G-I}{G-B}\right)\frac{I-G}{E-I}\frac{A-D}{E-D}\left(\frac{I-A}{I-B}\frac{I-E}{I-D}\right)\left(\frac{D-I}{D-A}/\frac{I-A}{D-I}\right).$$