



**Example 91 :** As shown in Figure 3, in the quadrilateral  $ABCD$  inscribed in the circle  $O$ , the feet of  $D$  on  $AC$  and  $AB$  are  $F$  and  $G$  respectively, and  $DG$  intersects the circle at  $L$ . Prove:  $FG \parallel CL$ .

$$\frac{G-F}{L-C} = \left( \frac{G-A}{D-L} \frac{D-F}{A-C} \right) \left( \frac{A-C}{A-D} \frac{L-D}{L-C} \right) \left( \frac{G-F}{G-A} \frac{D-A}{D-F} \right),$$