

**Solution** (#1146) We have

$$F = (ae, 0), \quad F' = (-ae, 0), \quad D : x = a/e, \quad D' : x = -a/e,$$

Given a point  $P$  on the ellipse then note  $|PF| + |PF'| = e|DP| + e|PD'| = e|DD'|$ .