



Example 194 : As shown in Figure 1 , A , B , C and D share a circle, BA intersects CD at P , point E extends PE on line segment BD , and intersects the circumscribed circle of $\triangle CDE$ at F . Prove: P , F , A , C are four points in a circle.

$$\frac{\overline{B-P}}{\overline{A-C}} = \frac{\overline{B-D}}{\overline{F-P}} \frac{\overline{B-P}}{\overline{C-A}},$$

$$\frac{\overline{B-P}}{\overline{F-C}} = \frac{\overline{B-D}}{\overline{F-C}} \frac{\overline{B-P}}{\overline{C-P}},$$