

Example 65: As shown in Figure 1,  $\triangle$  in ABC, there are points D and E on BA and BC respectively, and BD = BE, points F and G on CA and on the extension line of CB respectively, and CF = CG, and DE intersects FG at P, then  $\angle DPF = \frac{1}{2} \angle A$ .

$$\frac{\left(\frac{P-F}{P-D}\right)^{2}}{\frac{A-C}{A-B}} = \frac{\frac{B-A}{D-P}}{\frac{D-P}{B-C}} \frac{\frac{F-P}{B-C}}{\frac{C-A}{F-P}}$$