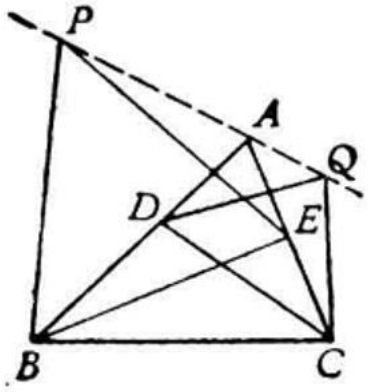

Example 208 : As shown in Figure 1 , D and E *are* the points on the sides AB and AC respectively $\triangle ABC$. Make isosceles $\triangle BEP$ and isosceles $\triangle CDQ$ to make the vertices $\angle P=\angle Q=\angle A$. Prove that the three points P, A and Q are collinear .

prove: $\dfrac{P-A}{A-Q}=\dfrac{\dfrac{E-B}{E-P}}{\dfrac{A-B}{A-P}}\dfrac{\dfrac{C-D}{C-Q}}{\dfrac{E-B}{E-P}}\dfrac{\dfrac{Q-C}{Q-A}}{\dfrac{D-C}{A-B}}$