

Example 1 97: As shown in Figure 1, in  $\triangle$  *ABT*, draw a tangent to the circumscribed circle of  $\triangle$  *ABT through T*, intersect *AB* at *P*, and *TD* bisect  $\angle$ ATB. Prove: PD = PT.

Proof: 
$$\frac{\frac{B-P}{D-T}}{\frac{T-D}{T-P}} = \frac{\frac{T-B}{T-D}}{\frac{T-D}{T-A}} \frac{\frac{B-P}{B-T}}{\frac{T-A}{T-P}},$$