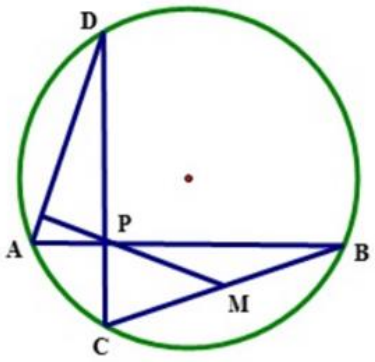

Example 1 94 : As shown in Figure 1 , it is known that $AB \perp CD$, AB intersects CD at P, and M is the midpoint of BC. Prove: The necessary and sufficient condition for $PM \perp AD$ is that A, C, B, and D share a circle.

Proof: $\dfrac{P-M}{D-A}=\dfrac{\dfrac{P-M}{P-C}\dfrac{C-D}{C-B}}{\dfrac{C-D}{C-B}\dfrac{A-D}{A-B}}\dfrac{C-P}{A-B}$,