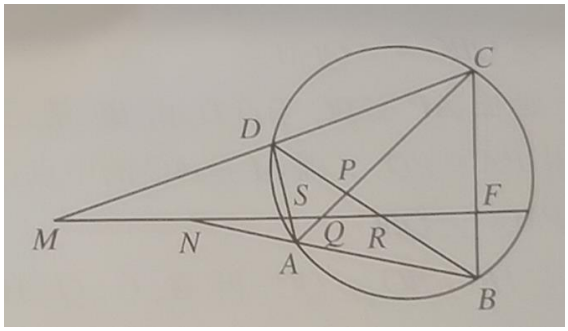

Example 2 20 : As shown in the figure, the quadrilateral $ABCD$ is inscribed in a circle , and the straight line MN forms equal angles with AD and BC . Prove that this straight line forms equal angles with another set of sides AB and CD , and forms equal angles with the two diagonals AC and BD also form equal angles.

$$\frac{\frac{A-B}{M-N}}{\frac{M-N}{D-C}}=\frac{\frac{A-D}{M-N}}{\frac{N-M}{B-C}}\frac{\frac{B-A}{A-D}}{\frac{C-B}{C-D}},\quad \frac{\frac{A-C}{M-N}}{\frac{N-M}{B-D}}=\frac{\frac{A-D}{M-N}}{\frac{N-M}{B-C}}\frac{\frac{D-B}{D-A}}{\frac{C-B}{C-A}},$$