

Example 2 24: As shown in the figure, quadrilateral ABCD has points M and P on AC, points N and Q on BD, four points A, B, M and N share a circle, D, C, P and Q share a circle, A, B, C, D four points share a circle, and prove that: P, Q, M, N share a circle.

$$\frac{M-N}{\frac{A-C}{D-B}} = \frac{\frac{D-B}{D-C}}{\frac{A-B}{A-C}} \frac{\frac{Q-P}{B-D}}{\frac{C-A}{D-C}} \frac{\frac{A-B}{A-C}}{\frac{D-B}{M-N}}$$