

Example 1 36: As shown in the figure, \triangle ABC, AB = AC, the perpendicular of AB intersects AB at D, BC at M, and AC at N. Prove that $2 \angle BMN = \angle BAC$.

$$\frac{\left(\frac{C-B}{M-N}\right)^2}{\frac{A-C}{A-B}} = -\left(\frac{A-B}{M-N}\right)^2 \frac{\frac{C-B}{C-A}}{\frac{B-A}{B-C}},$$