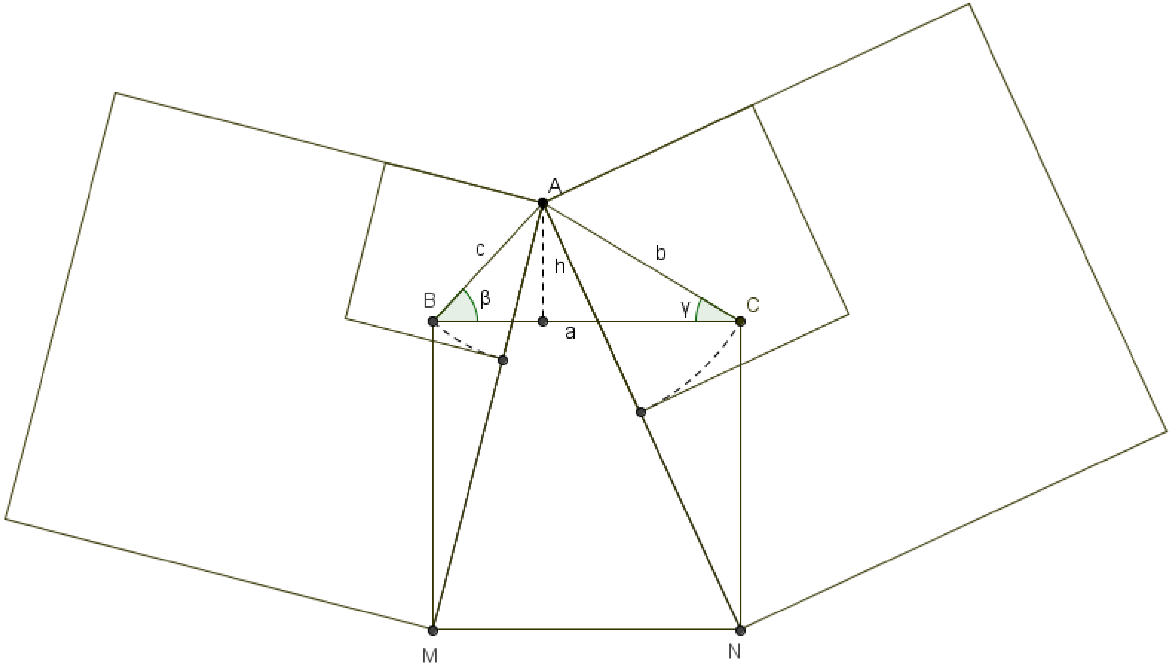
PROBLEEM VAN DE UITGEKNIPTE VIERKANTEN – opgelost



In Δ ABM: $|AM|^2 = a^2 + c^2 - 2ac \cos A\hat{B}M$
$= a^2 + c^2 - 2ac \cos (90° + \beta)$
$= a^2 + c^2 + 2ac \sin \beta$
$= a^2 + c^2 + 2ah.$

In Δ ACN: $|AN|^2 = a^2 + b^2 - 2ab \cos A\hat{C}N$
$= a^2 + b^2 - 2ab \cos (90° + \gamma)$
$= a^2 + b^2 + 2ab \sin \gamma$
$= a^2 + b^2 + 2ah.$

Dan is $|AM|^2 - |AN|^2 = c^2 - b^2$ en dus is $|AM|^2 - c^2 = |AN|^2 - b^2$.

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