Proving Triangle Theorems - Step-by-Step Lesson

Prove: Triangle Sum Theorem

Given :

$\angle A = 52°$
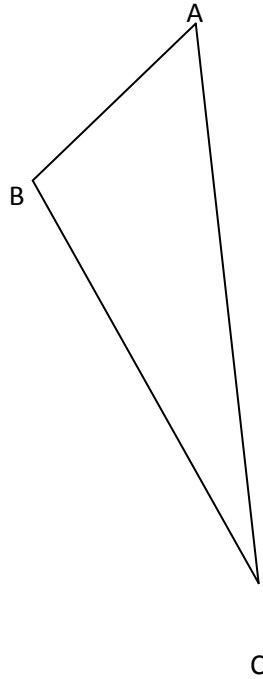
$\angle B = 105°$

Prove:

$\angle C = 23°$

A

B

C

Explanation:

The sum of the measures of the angles of a triangle is $180°$.

$\angle A + \angle B + \angle C = 180°$

$42° + 105° + \angle C = 180°$

$\angle C = 180° - 157°$

$\angle C = 23°$