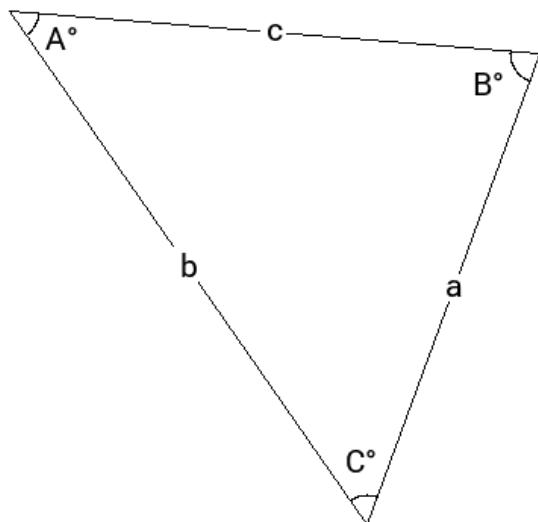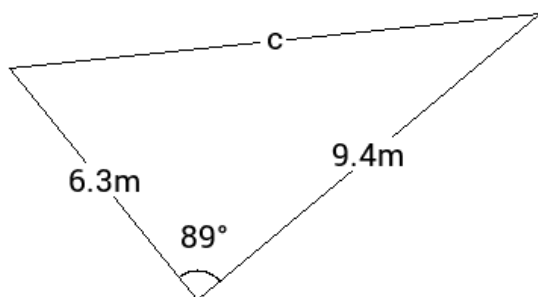# Notes from Lesson 2: Cosine Rule to Find Side

Remember our triangle from before:

A really awesome formula is the cosine formula is: $c^2 = a^2 + b^2 - 2ab\cos(C)$

We could write this as $c = \sqrt{a^2 + b^2 - 2ab\cos(C)}$

Let's look at an example with numbers

$c = \sqrt{6.3^2 + 9.4^2 - 2 \times 6.3 \times 9.4 \times \cos(89)} = 11.2m$ (3sf)