Question 2: Medium

Using the Cosine Law, calculate the length of side b.

Answer:

27.14m = b

Working:
Firstly we write the Cosine Law.

$c^{2}$= $a^{2}$+$b^{2}$ - 2.a.b.cos(C)

Then we input our variables:

We will use 12m for side a and 10m for side b. Angle C will be equal to 110ᶿ as that is the angle opposite to side c.
Therefore:
$c^{2}$= $12^{2}$+$10^{2}$ - 2.12.10.cos(110ᶿ)

$c^{2}$= 326.084 m

c=18m