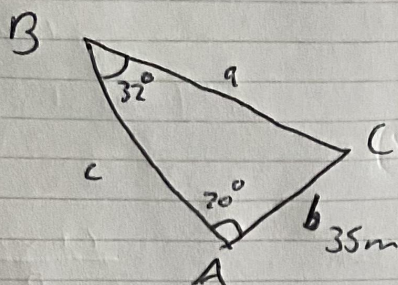


2)



i)

$$\begin{aligned} C &= 70 + 32 \\ &= 102 \\ &= 180 - 102 \\ C &= 78^\circ \end{aligned}$$

ii)

$$\begin{aligned} \frac{a}{\sin A} &= \frac{b}{\sin B} = \frac{c}{\sin C} \\ \frac{AB}{\sin 78} &= \frac{35}{\sin 32} \\ AB &= \frac{35 \times \sin(78)}{\sin(32)} \\ AB &= 64.6 \text{ m} \end{aligned}$$

211)

~~$$\begin{aligned} \frac{a}{\sin A} &= \frac{b}{\sin B} = \frac{c}{\sin C} \\ \frac{35}{\sin 32} &= \frac{BC}{\sin 70} \\ BC &= \frac{35 \times \sin(70)}{\sin(32)} \\ BC &= 61.9 \text{ m} \end{aligned}$$~~

iii)

$$\begin{aligned} a^2 &= b^2 + c^2 - 2bc \cos A \\ BC^2 &= 35^2 + 64.6^2 - 2 \times 35 \times 64.6 \cos(70) \\ &= 1225 + 4147.36 - 4508 \times 0.34 \\ BC^2 &= 5372.36 - 1532.72 \\ BC^2 &= 3839.64 \\ BC &= \sqrt{3839.64} \\ BC &= 61.9 \text{ m} \end{aligned}$$