

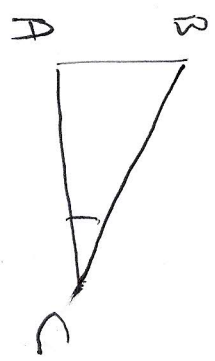
Exercice 3

$$4 \cos^2 x - 16 = 0 \Leftrightarrow \cos^2 x = 4$$

c'est impossible car $-2 \leq \cos x \leq 2$.

Donc il n'y a pas de solutions.

Exercice 4



Théorème de Pythagore: $BC^2 = AC^2 + AB^2 = 4^2 + 3^2 = 16 + 9 = 25$

$$\text{Donc } BC = \sqrt{25} = 5$$

$$\cos \widehat{ACB} = \frac{4}{5} = 0,8 \Leftrightarrow \widehat{ACB} = \underline{\underline{41 \text{ grad}}}.$$

$$\begin{aligned} \widehat{BAC} + \widehat{ACB} + \widehat{CBA} &= 200 \Leftrightarrow \widehat{ABC} = 200 - \widehat{BAC} - \widehat{ACB} \\ &= 200 - 100 - 41 \\ &= \underline{\underline{59 \text{ grad}}} \end{aligned}$$