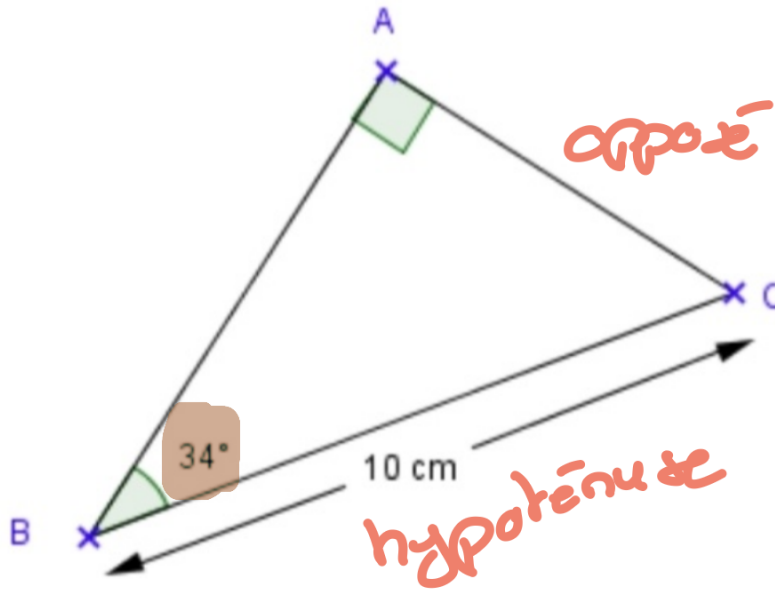


EXERCICE 4 :

Calculer, dans chaque cas, l'arrondi à 0,1 cm près de AC.

a.

b.



a) Dans le triangle ABC rectangle en A, on a : ①

$$\sin(\widehat{ABC}) = \frac{AC}{BC} \quad ②$$

$$\sin(34) = \frac{AC}{10} \quad ③$$

$$\text{donc } AC = \sin(34) \times 10 \approx 5,6 \text{ cm} \quad ④$$

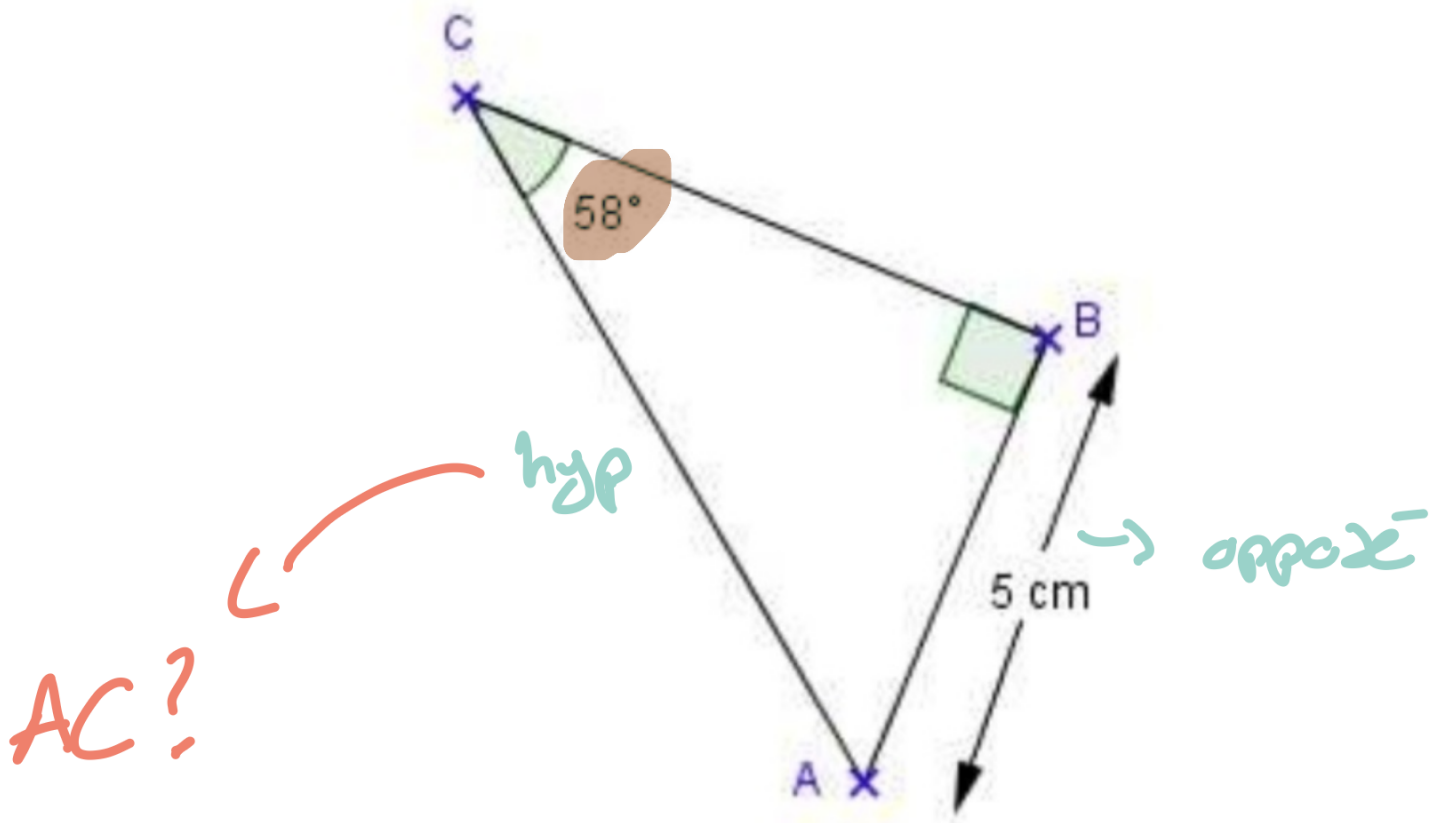
$$\cos(\alpha) = \frac{\text{adjacent}}{\text{hyp.}}$$

$$\sin(\alpha) = \frac{\text{opposite}}{\text{hyp}}$$

$$\tan(\alpha) = \frac{\text{opposite}}{\text{adjacent}}$$

CAH SOH TOA

C.



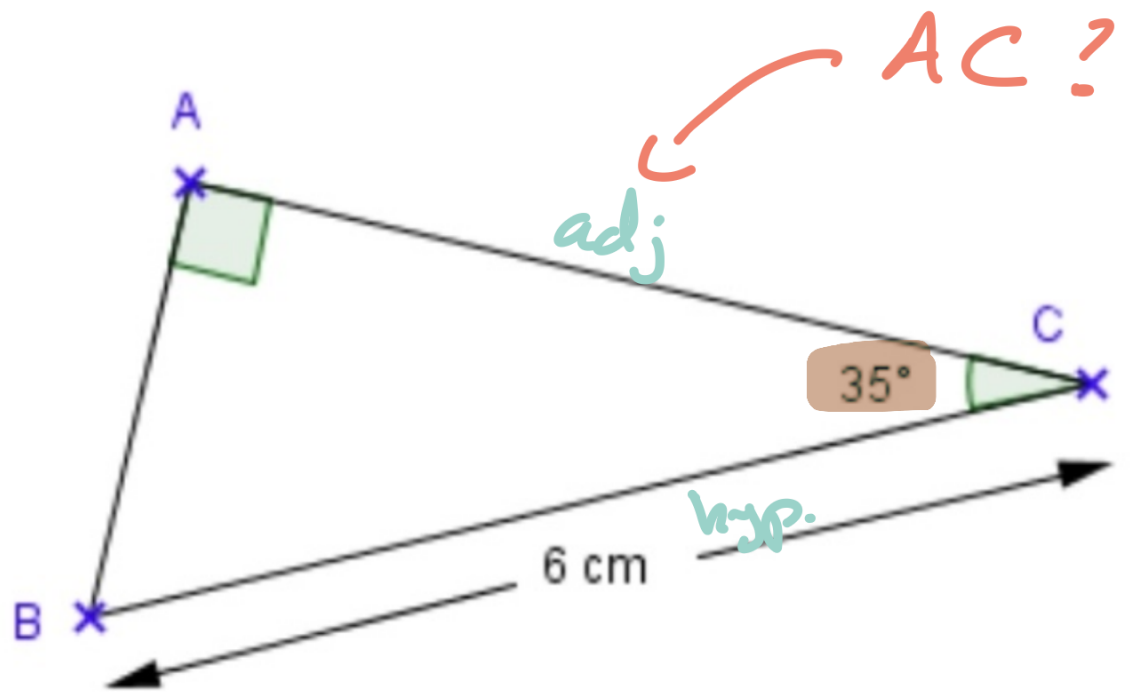
c) Dans le triangle ABC rectangle en B, on a :

$$\sin(\widehat{BCA}) = \frac{BA}{AC}$$

$$\sin(58) = \frac{5}{AC}$$

$$\text{dnc } AC = \frac{5 \times 1}{\sin(58)} \approx 5,9 \text{ cm.}$$

d.



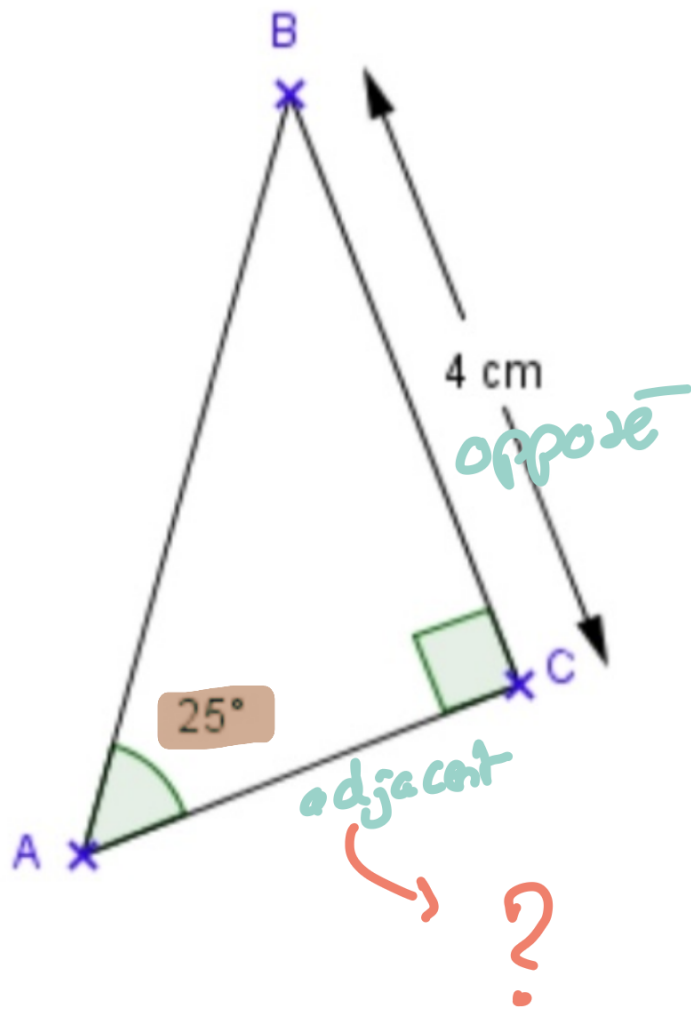
d) Dans le triangle ABC rectangle en A, on a :

$$\cos(\widehat{ACB}) = \frac{AC}{BC}$$

$$\cos(35) = \frac{AC}{6}$$

$$\text{donc } AC = 6 \times \cos(35) \approx 4,9 \text{ cm}$$

b.



Dans le triangle ABC
rectangle en C, on a :

$$\tan(\widehat{BAC}) = \frac{BC}{AC}$$

$$\tan(25) = \frac{4}{AC}$$

$$\text{donc } AC = \frac{4}{\tan(25)} \approx 8,6 \text{ cm.}$$