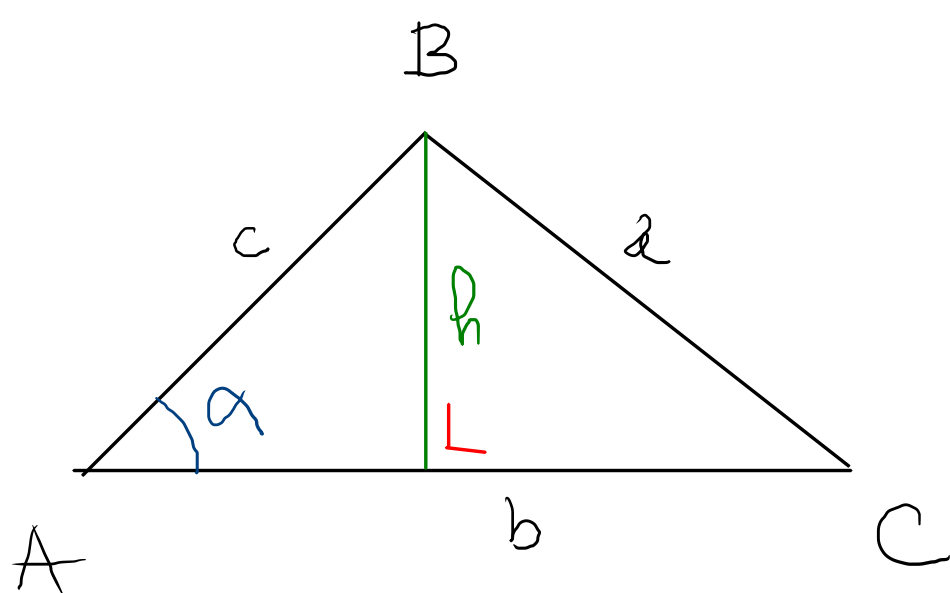


Théorème de l'aire

02.05.22



Aire $\triangle ABC$: $\frac{1}{2}$ base \cdot hauteur

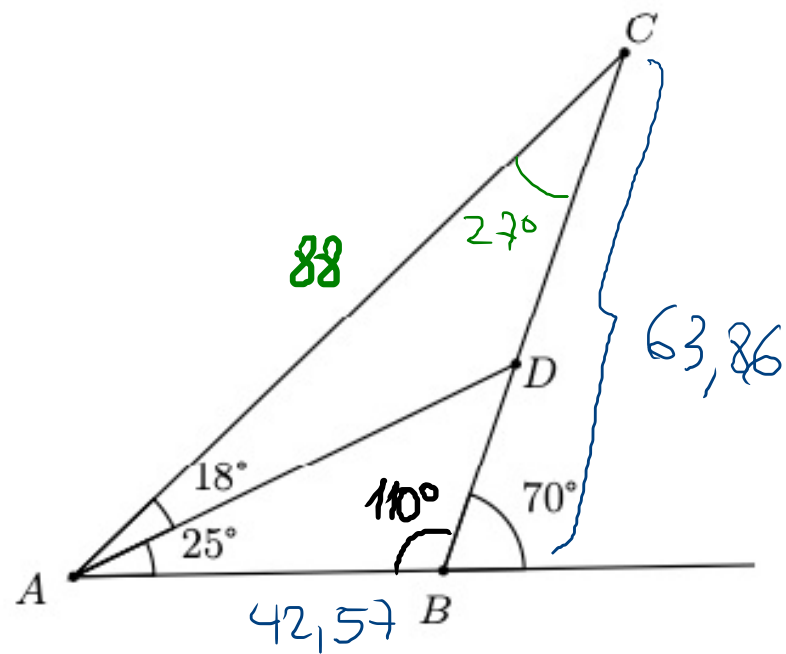
$$A = \frac{1}{2} \cdot AC \cdot h = \frac{1}{2} b c \sin(\alpha)$$

$$\sin(\alpha) = \frac{h}{AC} = \frac{h}{c} \Rightarrow h = c \cdot \sin(\alpha)$$

$$A = \frac{1}{2} b \cdot c \sin(\alpha) = \frac{1}{2} c \cdot a \sin(B) = \frac{1}{2} a b \sin(\gamma)$$

4.4.6 - 4.4.7 - 4.4.8 - 4.4.10 - 4.4.12

4.4.6 Calculer la longueur des segments BC , BD , AD et AB , sachant que la longueur du segment AC vaut 88 cm.



Thm du sinus

$$\frac{88}{\sin(88^\circ)} = \frac{BC}{\sin(43^\circ)} \Rightarrow BC = \frac{88 \cdot \sin(43^\circ)}{\sin(110^\circ)} = 63,86 \text{ [cm]}$$

Thm du cosinus

$$AB^2 = 88^2 + 63,86^2 - 2 \cdot 88 \cdot 63,86 \cdot \cos(27^\circ)$$

$$AB = 42,57 \text{ [cm]}$$

Mardi : - Finir 4.4.6
- 4.4.7