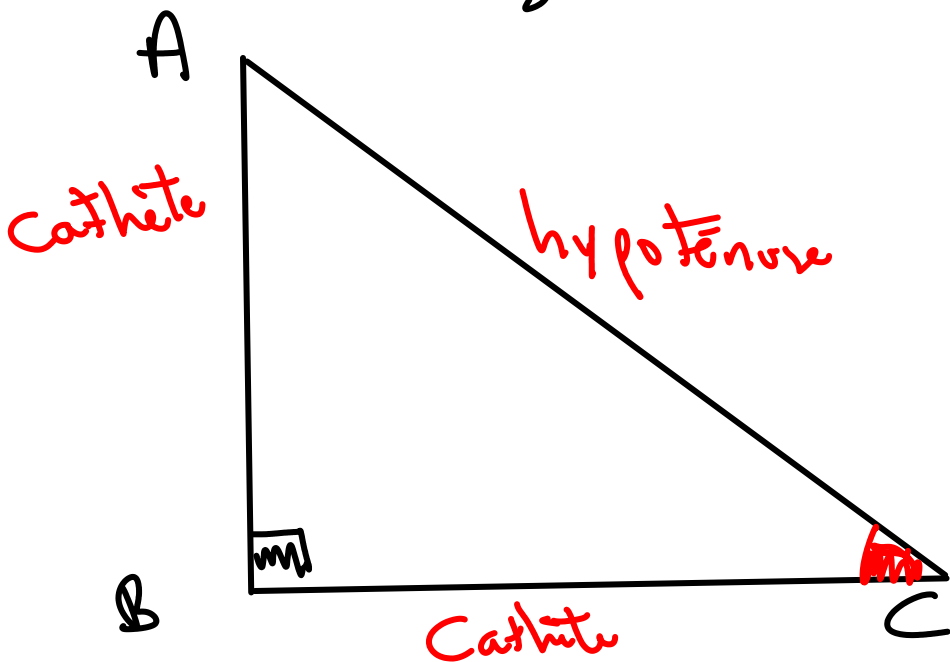


TRIGO

- Δ rectangle

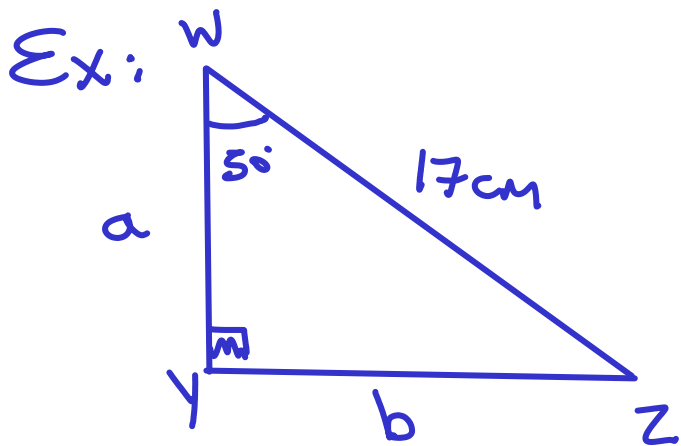


Par rapport à $\angle C$
 \overline{BA} est opposé
 \overline{BC} est adjacent

$$\sin C = \frac{\text{opposé}}{\text{hypoténuse}} \Rightarrow \frac{BA}{AC} \quad \tan C = \frac{\text{opp}}{\text{adj}} = \frac{AB}{BC}$$

$$\cos C = \frac{\text{adjacent}}{\text{hyp.}} \Rightarrow \frac{BC}{AC}$$

SOH CAH TOA



a: ce que je connais

- angle
- hypoténuse

ce que je cherche

- adjacent

\rightarrow cos

$$\cos 50 = \frac{a}{17}$$

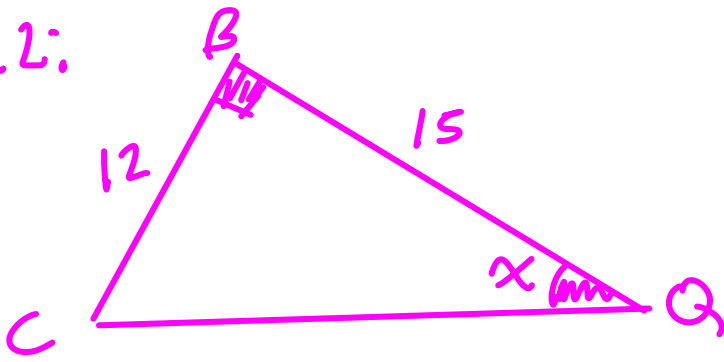
on isole

b:

$$b^2 + a^2 = 17^2$$
$$b^2 + 10,93^2 = 289$$
$$b = 13,02$$

$$17 \cdot \cos 50 = a$$
$$10,93 = a$$

ex 1:

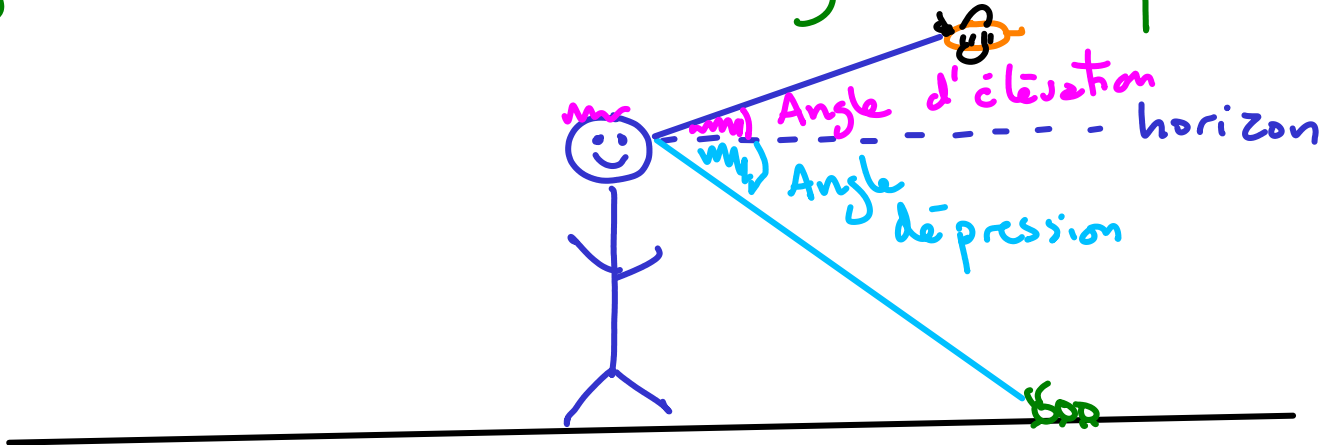


$$\tan x = \frac{12}{15}$$

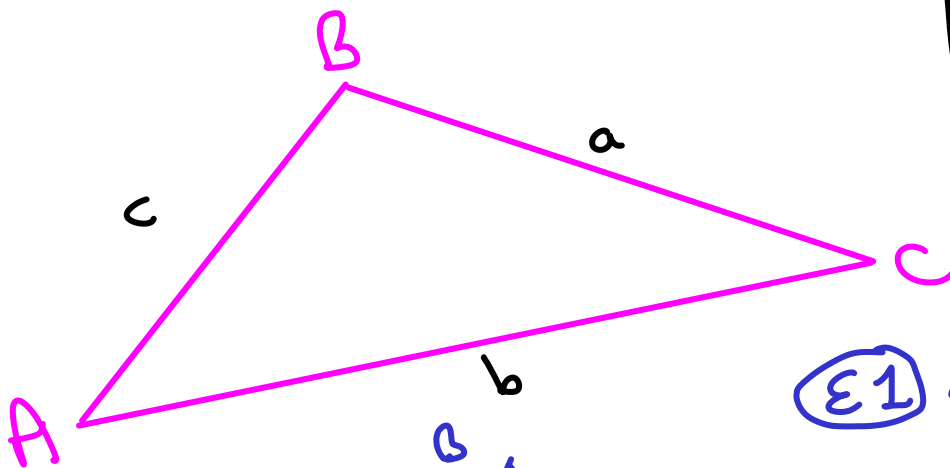
$$\tan^{-1}\left(\frac{12}{15}\right) = x$$

$$x = 38,66^\circ$$

Angles d'élevation et angles de dépression



△ non-rectangle

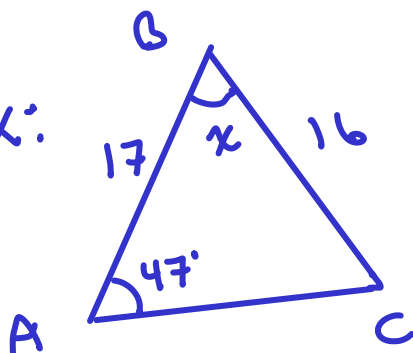


loi du sinus

$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

CoS CCA ou AAC

ex:



$$\textcircled{E1} \quad \frac{\sin 47}{16} = \frac{\sin C}{17}$$

$$17 \frac{\sin 47}{16} = \sin C$$

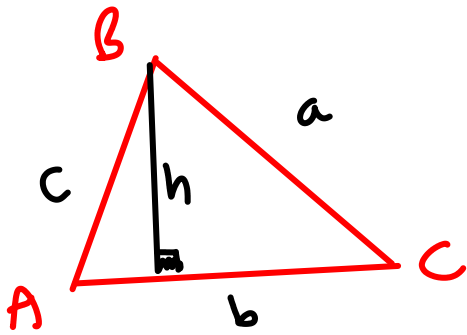
$$0,77706 = \sin C$$

$$\sin^{-1}(0,77706) = 51^\circ$$

$$180 - 47 - 51 = 82^\circ$$

Si il y a un angle obtus, faire $180 - \text{Angle}$

Aire du triangle



① $\frac{b \cdot h}{2}$

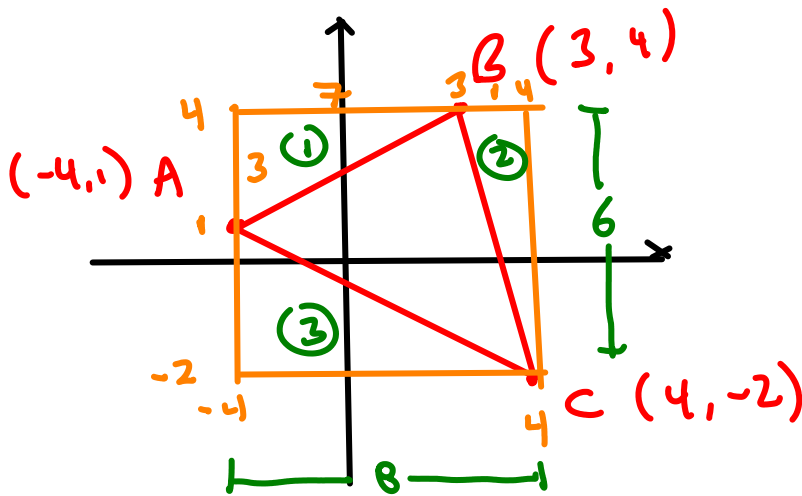
② Héron $d_p = \text{demi-périmètre}$

$$\sqrt{d_p (d_p - a)(d_p - b)(d_p - c)}$$

③ Si on connaît $\angle A$

$$\frac{c \cdot b \cdot \sin A}{2} = \text{Aire } \Delta$$

④ Truc du rectangle



$$A_{\square} = 8 \cdot 6 = 48$$

$$A_{\Delta} = \frac{3 \cdot 7}{2} = 10,5$$

$$A_{\Delta} = \frac{1 \cdot 6}{2} = 3$$

$$A_{\Delta} = \frac{8 \cdot 3}{2} = 12$$

$$A_{\Delta} = 24,5$$

