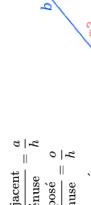
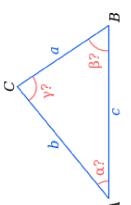


PYTHAGORE/CAH-SOH-TOA

$$\cos(\widehat{A}) = \frac{\text{côt\'e adjacent}}{\text{hypot\'enuse}}$$
$$\sin(\widehat{A}) = \frac{\text{côt\'e oppos\'e}}{\text{hypot\'enuse}} = \frac{\text{côt\'e oppos\'e}}{\text{hypot\'enuse}}$$

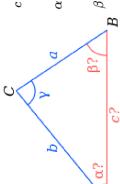


$$\tan(\widehat{A}) = \frac{\mathrm{côt\acute{e}\ oppos\acute{e}}}{\mathrm{côt\acute{e}\ adjacent}} = \frac{o}{a}$$



$$lpha = \arccos\left(rac{c^2+c^2-a}{2bc}
ight)$$
 $eta = \arccos\left(rac{c^2+a^2-b^2}{2ca}
ight)$
 $\gamma = \arccos\left(rac{a^2+b^2-c^2}{2ab}
ight)$
 $c = \sqrt{a^2+b^2-2ab\cos\gamma}$ $\cot = \frac{\cos}{\sin}$

 $b^2 + c^2 - a^2$



côté adjacent

TOI SINUS/COSINUS

angle A

 $\mathbf{a}^2 + \mathbf{b}^2 = \mathbf{c}^2$

$$lpha = rac{\pi}{2} - rac{\gamma}{2} + rctan \left(rac{a-b}{a+b}\cotrac{\gamma}{2}
ight) \ eta = rac{\pi}{2} - rac{\gamma}{2} - rctan \left(rac{a-b}{a+b}\cotrac{\gamma}{2}
ight)$$



$$\gamma = \arcsin\left(\frac{c\sin\beta}{b}\right)$$
 $lpha = \pi - \beta - \arcsin\left(\frac{c\sin\beta}{b}\right)$



 $c^2 = a^2 + b^2 - 2ab \cos \gamma.$

В

THALES

 $\sin \gamma$

 $\sin \beta$

 $\sin \alpha$ a



 $a = \sqrt{b^2 - c^2 \sin^2 \beta + c \cos \beta}$

$$a = rac{c\sinlpha}{\sin(lpha + eta)}$$
 $b = rac{c\sineta}{\sin(lpha + eta)}$

 $\gamma = \pi - \alpha - \beta$

$$\frac{AD}{AB} = \frac{AE}{AC} = \frac{DE}{BC}.$$