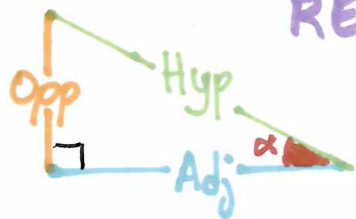


TRIGO

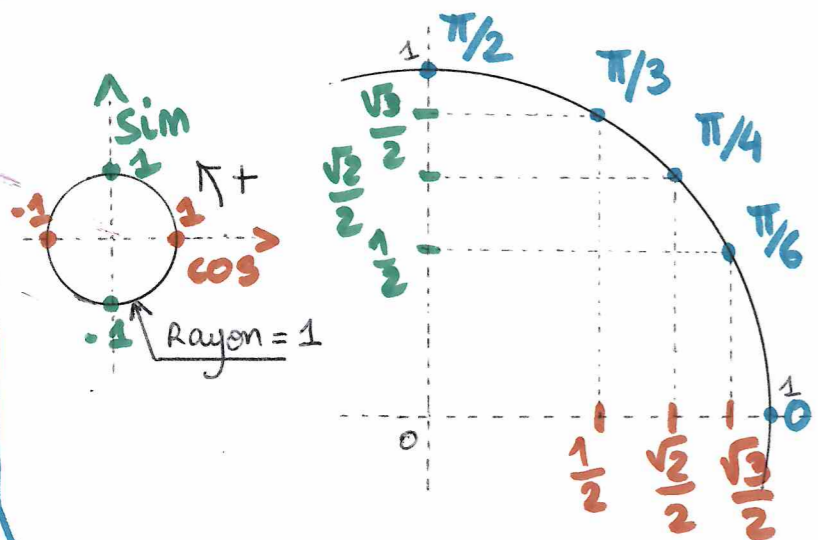
TRIANGLE RECTANGLE



$$\cos \alpha = \frac{\text{Adj}}{\text{Hyp}} \quad \sin \alpha = \frac{\text{Opp}}{\text{Hyp}} \quad \tan \alpha = \frac{\text{Opp}}{\text{Adj}}$$

CAH SOH TOA

CERCLE TRIGO



PROPRIÉTÉS

$$\cos^2(x) + \sin^2(x) = 1$$

$$-1 \leq \cos(x) \leq 1$$

$$-1 \leq \sin(x) \leq 1$$

$$\tan(x) = \frac{\sin(x)}{\cos(x)}$$

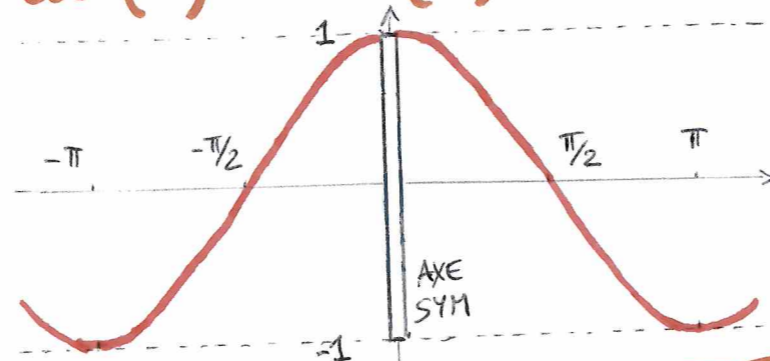
FONCTION COS

2π -périodique : $f(x+2\pi) = f(x)$

PAIRE : $f(-x) = f(x)$ Δ SYMÉTRIE AXIALE (Oy)

$$\cos'(x) = -\sin(x)$$

$$\cos'(u) = -\sin(u) \times u'$$



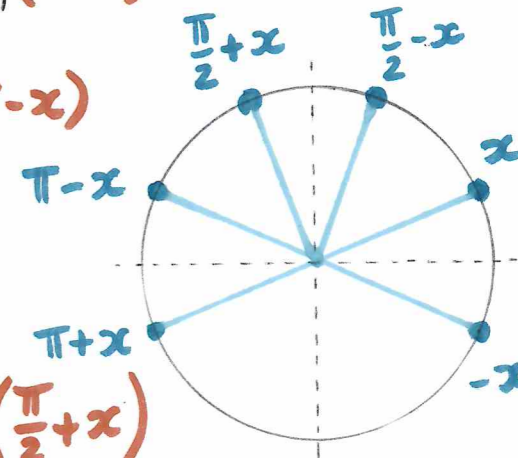
FORMULES TRIGO

$$\cos(a+b) \quad \cos(a-b)$$

$$\cos(-x) \quad \cos(\pi-x)$$

$$\cos(\pi+x)$$

$$\cos\left(\frac{\pi}{2}-x\right) \quad \cos\left(\frac{\pi}{2}+x\right)$$



EQUATION

$\cos(x) = \dots$	$\sin(x) = \dots$
$x = \alpha \text{ ou } -\alpha$	$x = \alpha \text{ ou } \pi - \alpha$
$[2\pi]$	$[2\pi]$

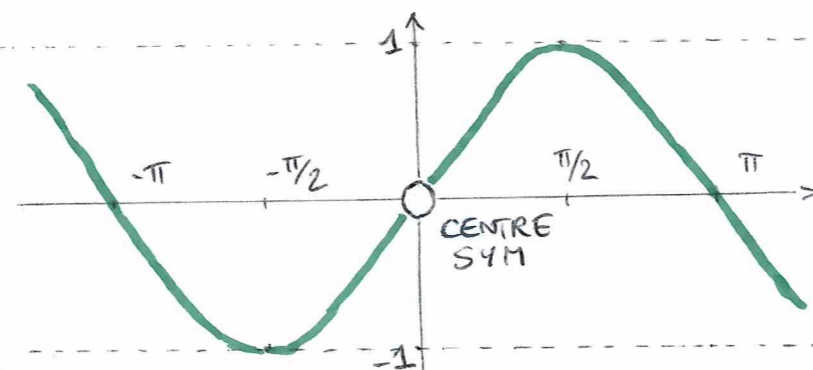
FONCTION SIN

2π -périodique : $f(x+2\pi) = f(x)$

IMPAIRE : $f(-x) = -f(x)$ Δ SYMÉTRIE CENTRALE O

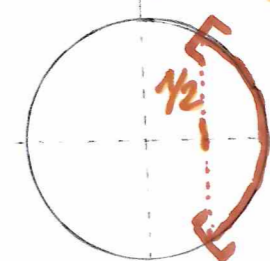
$$\sin'(x) = \cos(x)$$

$$\sin'(u) = \cos(u) \times u'$$



INEQUATION

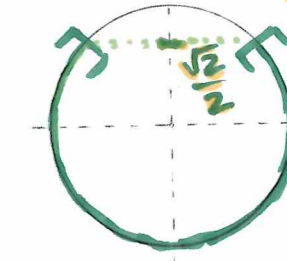
$$\cos(x) \geq \frac{1}{2}$$



$$x \in \left[-\frac{\pi}{3}; \frac{\pi}{3}\right]$$

$\Delta +k2\pi, k \in \mathbb{Z}$

$$\sin(x) \leq \frac{\sqrt{2}}{2}$$



$$x \in \left[-\frac{5\pi}{4}; \frac{\pi}{4}\right]$$

$\Delta +k2\pi, k \in \mathbb{Z}$