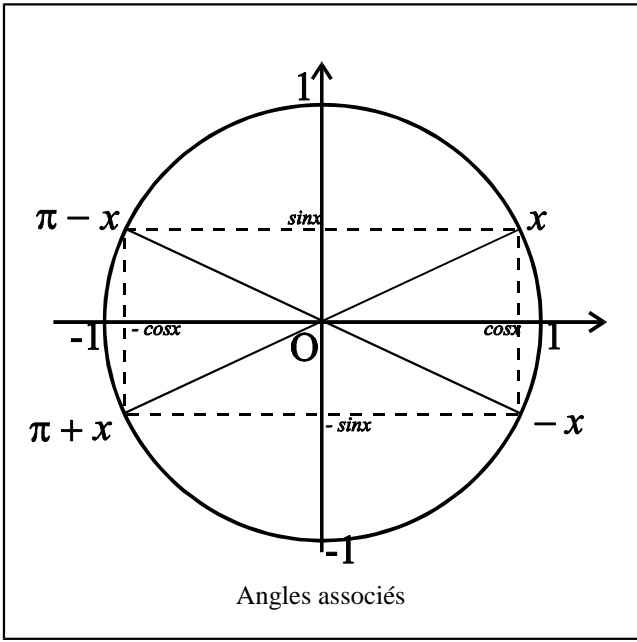
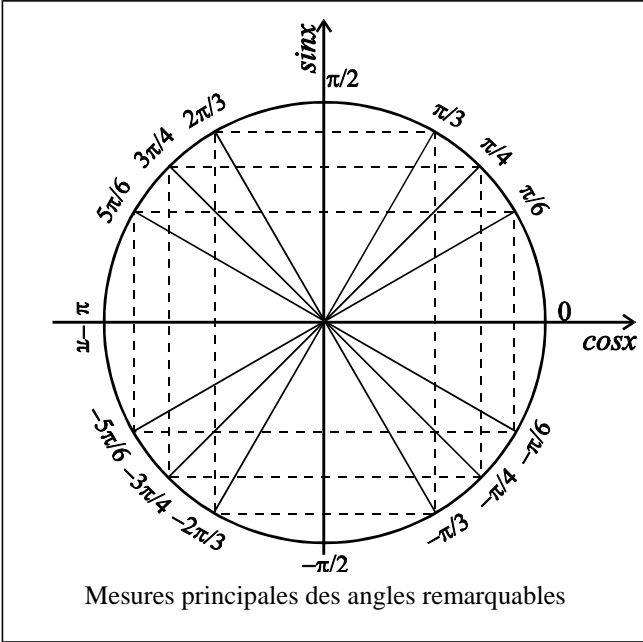


TRIGONOMETRIE



x	0	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$
sinx	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
cosx	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
tanx	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	X

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

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

$$1 + \tan^2 x = \frac{1}{\cos^2 x}$$

$$\begin{aligned} \cos(a - b) &= \cos a \cos b + \sin a \sin b \\ \cos(a + b) &= \cos a \cos b - \sin a \sin b \\ \sin(a - b) &= \sin a \cos b - \cos a \sin b \\ \sin(a + b) &= \sin a \cos b + \cos a \sin b \end{aligned}$$

$$\begin{aligned} \cos 2x &= \cos^2 x - \sin^2 x \\ &= 2\cos^2 x - 1 \\ &= 1 - 2\sin^2 x \\ \sin 2x &= 2\sin x \cos x \end{aligned}$$

$$\begin{aligned} \cos x = \cos a & \text{ équivaut à} \\ \begin{cases} x = a + 2k\pi, k \in \mathbb{Z} \\ \text{ou } x = -a + 2k\pi, k \in \mathbb{Z} \end{cases} \end{aligned}$$

$$\begin{aligned} \sin x = \sin a & \text{ équivaut à} \\ \begin{cases} x = a + 2k\pi, k \in \mathbb{Z} \\ \text{ou } x = \pi - a + 2k\pi, k \in \mathbb{Z} \end{cases} \end{aligned}$$

$$\begin{aligned} \tan x = \tan a & \text{ équivaut à} \\ x = a + k\pi, k \in \mathbb{Z} \end{aligned}$$

$(\cos x)' = -\sin x$	$(\sin x)' = \cos x$	$(\tan x)' = 1 + \tan^2 x = \frac{1}{\cos^2 x}$
$(\cos u)' = -u' \sin u$	$(\sin u)' = u' \cos u$	$(\tan u)' = u'(1 + \tan^2 u) = \frac{u'}{\cos^2 u}$