Relations trigonométriques

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

Symétries:

α	$-\theta$	$\theta + \pi$	$\pi - \theta$	$\theta + 2\pi$	$\dfrac{\pi}{2} - \theta$	$\dfrac{\pi}{2} + \theta$
$cos(\alpha)$	$cos(\theta)$	$-cos(\theta)$	$-cos(\theta)$	$cos(\theta)$	$sin(\theta)$	$-sin(\theta)$
$sin(\alpha)$	$-sin(\theta)$	$-sin(\theta)$	$sin(\theta)$	$sin(\theta)$	$cos(\theta)$	$cos(\theta)$

Formules d'addition:

- $cos(x \oplus y) = cos(x)cos(y) \ominus sin(x)sin(y)$
- $sin(x \oplus y) = sin(x)cos(y) \oplus cos(x)sin(y)$
- $tan(x \oplus y) = \dfrac{tan(x) \oplus tan(y)}{1 \ominus tan(x)tan(y)}$

- $cos(x \ominus y) = cos(x)cos(y) \oplus sin(x)sin(y)$
- $sin(x \ominus y) = sin(x)cos(y) \ominus cos(x)sin(y)$
- $tan(x \ominus y) = \dfrac{tan(x) \ominus tan(y)}{1 \oplus tan(x)tan(y)}$

Formules de duplication:

- $cos(2x) = 2cos^2(x) - 1 = 1 - 2sin^2(x) = cos^2(x) - sin^2(x)$
- $sin(2x) = 2sin(x)cos(x)$
- $tan(2x) = \dfrac{2tan(x)}{1 - tan^2(x)}$

Formules de factorisation:

- $cos(x) + cos(y) = 2 \cos\left(\dfrac{x+y}{2}\right) \cos\left(\dfrac{x-y}{2}\right)$

- $cos(x) - cos(y) = -2 \sin\left(\dfrac{x+y}{2}\right) \sin\left(\dfrac{x-y}{2}\right)$

- $sin(x) + sin(y) = 2 \sin\left(\dfrac{x+y}{2}\right) \cos\left(\dfrac{x-y}{2}\right)$

- $sin(x) - sin(y) = 2 \sin\left(\dfrac{x-y}{2}\right) \cos\left(\dfrac{x+y}{2}\right)$