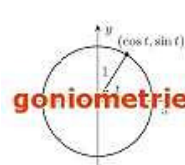


Goniometrie

Uit je hoofd leren:



Tabellen

	0	$\frac{1}{6}\pi$	$\frac{1}{4}\pi$	$\frac{1}{3}\pi$	$\frac{1}{2}\pi$		I	II	III	IV
sin	0	$\frac{1}{2}$	$\frac{1}{2}\sqrt{2}$	$\frac{1}{2}\sqrt{3}$	1	sin	+	+	-	-
cos	1	$\frac{1}{2}\sqrt{3}$	$\frac{1}{2}\sqrt{2}$	$\frac{1}{2}$	0	cos	+	-	-	+
tan	0	$\frac{1}{3}\sqrt{3}$	1	$\sqrt{3}$	-	tan	+	-	+	-

Formules

$-\sin(x) = \sin(-x)$	$\sin(x) = \cos(\frac{1}{2}\pi - x)$	$\tan(x) = \frac{\sin(x)}{\cos(x)}$
$-\cos(x) = \cos(x - \pi)$	$\cos(x) = \sin(\frac{1}{2}\pi - x)$	$\sin^2(x) + \cos^2(x) = 1$
$-\tan(x) = \tan(-x)$	$\sin(2x) = 2 \sin(x) \cos(x)$	$\cos(2x) = \begin{cases} 2 \cos^2(x) - 1 \\ 1 - 2 \sin^2(x) \\ \cos^2(x) - \sin^2(x) \end{cases}$

Methode

$\sin(x) = \sin(A)$ $x = A + k \cdot 2\pi \vee x = \pi - A + k \cdot 2\pi$
$\cos(x) = \cos(A)$ $x = A + k \cdot 2\pi \vee x = -A + k \cdot 2\pi$
$\tan(x) = \tan(A)$ $x = A + k \cdot \pi$

Bijzondere gevallen

$\sin(x) = 0$ $x = 0 + k \cdot \pi$	$\sin(x) = 1$ $x = \frac{1}{2}\pi + k \cdot 2\pi$	$\sin(x) = -1$ $x = 1\frac{1}{2}\pi + k \cdot 2\pi$
$\cos(x) = 0$ $x = \frac{1}{2}\pi + k \cdot \pi$	$\cos(x) = 1$ $x = 0 + k \cdot 2\pi$	$\cos(x) = -1$ $x = \pi + k \cdot 2\pi$