

CALCULUS UNIT CIRCLE REFERENCE

Standard Unit Circle
Radius $r = 1$

Degrees	Radians	$(\cos \theta, \sin \theta)$
0	0	(1, 0)
30	$\pi/6$	$(\sqrt{3}/2, 1/2)$
45	$\pi/4$	$(\sqrt{2}/2, \sqrt{2}/2)$
60	$\pi/3$	$(1/2, \sqrt{3}/2)$
90	$\pi/2$	(0, 1)
180	π	(-1, 0)
270	$3\pi/2$	(0, -1)

$$\begin{aligned}\sin \theta &= y / r \\ \cos \theta &= x / r \\ \tan \theta &= y / x \\ \csc \theta &= 1 / \sin \\ \sec \theta &= 1 / \cos \\ \cot \theta &= 1 / \tan\end{aligned}$$

Pythagorean Identity: $\sin^2\theta + \cos^2\theta = 1$

Tangent Identity: $\tan \theta = \sin \theta / \cos \theta$