

Cheet-sheet

Degrees	Radians (π)	Sine (sin)	Cosine (cos)	Tangent (tan)
0°	0	0	1	0
30°	$\pi/6$	1/2	$\sqrt{3}/2$	$\sqrt{3}/3$
45°	$\pi/4$	$\sqrt{2}/2$	$\sqrt{2}/2$	1
60°	$\pi/3$	$\sqrt{3}/2$	1/2	$\sqrt{3}$
90°	$\pi/2$	1	0	Undefined
120°	$2\pi/3$	$\sqrt{3}/2$	-1/2	$-\sqrt{3}$
135°	$3\pi/4$	$\sqrt{2}/2$	$-\sqrt{2}/2$	-1
150°	$5\pi/6$	1/2	$-\sqrt{3}/2$	$-\sqrt{3}/3$
180°	π	0	-1	0
210°	$7\pi/6$	-1/2	$-\sqrt{3}/2$	$\sqrt{3}/3$
225°	$5\pi/4$	$-\sqrt{2}/2$	$-\sqrt{2}/2$	1
240°	$4\pi/3$	$-\sqrt{3}/2$	-1/2	$\sqrt{3}$
270°	$3\pi/2$	-1	0	Undefined
300°	$5\pi/3$	$-\sqrt{3}/2$	1/2	$-\sqrt{3}$
315°	$7\pi/4$	$-\sqrt{2}/2$	$\sqrt{2}/2$	-1
330°	$11\pi/6$	-1/2	$\sqrt{3}/2$	$\sqrt{3}/3$
360°	2π	0	1	0

$$\sin(A \pm B) = \sin(A) \cos(B) \pm \cos(A) \sin(B)$$

$$\cos(A \pm B) = \cos(A) \cos(B) \mp \sin(A) \sin(B)$$

$$\tan(A \pm B) = \frac{\tan(A) \pm \tan(B)}{1 \mp \tan(A) \tan(B)}$$

$$\sin(2A) = 2 \sin(A) \cos(A)$$

$$\cos(2A) = \cos^2(A) - \sin^2(A) = 2 \cos^2(A) - 1 = 1 - 2 \sin^2(A)$$

$$\tan(2A) = \frac{2 \tan(A)}{1 - \tan^2(A)}$$

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

$$\tan^2 A + 1 = \sec^2 A$$

$$\cos^2 A = \frac{1}{2}(1 + \cos 2A)$$

$$\sin^2 A = \frac{1}{2}(1 - \cos 2A)$$