

**Trig Tables, designed and formatted by Your Instructor**

**Table 1: Sine, cosine, and tangent of standard acute angles**

$\theta$ (deg)	$\theta$ (rad)	$\sin(\theta)$	$\cos(\theta)$	$\tan(\theta)$
$30^\circ$	$\frac{\pi}{6}$	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$
$45^\circ$	$\frac{\pi}{4}$	$\frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$	$\frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$	1
$60^\circ$	$\frac{\pi}{3}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$

**Table 2: Trigonometric functions of quadrantal angles (axis angles)**

$\theta$ (deg)	$\theta$ (rad)	$\sin(\theta)$	$\cos(\theta)$	$\tan(\theta)$	$\cot(\theta)$	$\sec(\theta)$	$\csc(\theta)$
$0^\circ$	0	0	1	0	Undef	1	Undef
$90^\circ$	$\frac{\pi}{2}$	1	0	Undef	0	Undef	1
$180^\circ$	$\pi$	0	-1	0	Undef	-1	Undef
$270^\circ$	$\frac{3\pi}{2}$	-1	0	Undef	0	Undef	-1
$360^\circ$	$2\pi$	0	1	0	Undef	1	Undef

**Table 3: Signs of trigonometric functions**

Q	Angles ( $^\circ$ )	Angles (rad)	$\sin(\theta)$	$\cos(\theta)$	$\tan(\theta)$	$\cot(\theta)$	$\sec(\theta)$	$\csc(\theta)$
1	$0^\circ < \theta < 90^\circ$	$0 < \theta < \frac{\pi}{2}$	+	+	+	+	+	+
2	$90^\circ < \theta < 180^\circ$	$\frac{\pi}{2} < \theta < \pi$	+	-	-	-	-	+
3	$180^\circ < \theta < 270^\circ$	$\pi < \theta < \frac{3\pi}{2}$	-	-	+	+	-	-
4	$270^\circ < \theta < 360^\circ$	$\frac{3\pi}{2} < \theta < 2\pi$	-	+	-	-	+	-

**Table 4: Values and signs of trigonometric functions on axes and in quadrants.**

Table 4 contains all of the information from Tables 2 and 3.

Q	$(\theta)$ Degrees	$(\theta)$ Radians	$\sin(\theta)$	$\cos(\theta)$	$\tan(\theta)$	$\cot(\theta)$	$\sec(\theta)$	$\csc(\theta)$
	$0^\circ$	0	0	1	0	Undef	1	Undef
1	$0^\circ < \theta < 90^\circ$	$0 < \theta < \frac{\pi}{2}$	+	+	+	+	+	+
	$90^\circ$	$\frac{\pi}{2}$	1	0	Undef	0	Undef	1
2	$90^\circ < \theta < 180^\circ$	$\frac{\pi}{2} < \theta < \pi$	+	-	-	-	-	+
	$180^\circ$	$\pi$	0	-1	0	Undef	-1	Undef
3	$180^\circ < \theta < 270^\circ$	$\pi < \theta < \frac{3\pi}{2}$	-	-	+	+	-	-
	$270^\circ$	$\frac{3\pi}{2}$	-1	0	Undef	0	Undef	-1
4	$270^\circ < \theta < 360^\circ$	$\frac{3\pi}{2} < \theta < 2\pi$	-	+	-	-	+	-
	$360^\circ$	$2\pi$	0	1	0	Undef	1	Undef