Trigonometric Exact Values for Special Angles for $0 \le m\angle\theta \le 2\pi$

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Quad	M∠θ	Sin θ	Cos θ	Tan θ	Csc θ	Sec θ	Cot θ
Positive x-axis	**0**	0	1	0	ND	1	ND
First Quadrant	$\frac{\pi}{12}$	$\frac{\sqrt{6}-\sqrt{2}}{4}$	$\frac{\sqrt{6}+\sqrt{2}}{4}$	$\frac{\sqrt{3}-1}{\sqrt{3}+1}$	$\sqrt{2}+\sqrt{6}$	$\sqrt{6}-\sqrt{2}$	$\frac{\sqrt{3}+1}{\sqrt{3}-1}$
	$\frac{\pi}{6}$	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{3}}{3}$	2	$\frac{2\sqrt{3}}{3}$	$\sqrt{3}$
	$\frac{\pi}{4}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	1	$\sqrt{2}$	$\sqrt{2}$	1
	$\frac{\pi}{3}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$	$\frac{2\sqrt{3}}{3}$	2	$\frac{\sqrt{3}}{3}$
	$\frac{5\pi}{12}$	$\frac{\sqrt{6}+\sqrt{2}}{4}$	$\frac{\sqrt{6}-\sqrt{2}}{4}$	$\frac{\sqrt{3}+1}{\sqrt{3}-1}$	$\sqrt{6}-\sqrt{2}$	$\sqrt{2}+\sqrt{6}$	$\frac{\sqrt{3}-1}{\sqrt{3}+1}$
Positive y-axis	$\frac{\pi}{2}$	1	0	ND	1	ND	0
Second Quadrant	$\frac{7\pi}{12}$	$\frac{\sqrt{6}+\sqrt{2}}{4}$	$-\frac{\sqrt{6}-\sqrt{2}}{4}$	$-\frac{\sqrt{3}+1}{\sqrt{3}-1}$	$\sqrt{6}-\sqrt{2}$	$-\sqrt{2}-\sqrt{6}$	$-\left(\frac{\sqrt{3}-1}{\sqrt{3}+1}\right)$
	$\frac{2\pi}{3}$	$\frac{\sqrt{3}}{2}$	$-\frac{1}{2}$	$-\sqrt{3}$	$\frac{2\sqrt{3}}{3}$	- 2	$-\frac{\sqrt{3}}{3}$
	$\frac{3\pi}{4}$	$\frac{\sqrt{2}}{2}$	$-\frac{\sqrt{2}}{2}$	- 1	$\sqrt{2}$	$-\sqrt{2}$	- 1
	$\frac{5\pi}{6}$	$\frac{1}{2}$	$-\frac{\sqrt{3}}{2}$	$-\frac{\sqrt{3}}{3}$	2	$-\frac{2\sqrt{3}}{3}$	$-\sqrt{3}$
	$\frac{11\pi}{12}$	$\frac{\sqrt{6}-\sqrt{2}}{4}$	$-\frac{\sqrt{6}+\sqrt{2}}{4}$	$-\frac{\sqrt{3}-1}{\sqrt{3}+1}$	$\sqrt{2}+\sqrt{6}$	$\sqrt{2}-\sqrt{6}$	$-\left(\frac{\sqrt{3}+1}{\sqrt{3}-1}\right)$
Negative x-axis	π	0	- 1	0	ND	- 1	ND
Third Quadrant	$\frac{13\pi}{12}$	$-\frac{\sqrt{6}-\sqrt{2}}{4}$	$-\frac{\sqrt{6}+\sqrt{2}}{4}$	$\frac{\sqrt{3}-1}{\sqrt{3}+1}$	$-\sqrt{2}-\sqrt{6}$	$\sqrt{2}-\sqrt{6}$	$\frac{\sqrt{3}+1}{\sqrt{3}-1}$
	$\frac{7\pi}{6}$	$-\frac{1}{2}$	$-\frac{\sqrt{3}}{2}$	$\frac{\sqrt{3}}{3}$	- 2	$-\frac{2\sqrt{3}}{3}$	$\sqrt{3}$
	$\frac{5\pi}{4}$	$-\frac{\sqrt{2}}{2}$	$-\frac{\sqrt{2}}{2}$	1	$-\sqrt{2}$	$-\sqrt{2}$	1
	$\frac{4\pi}{3}$	$-\frac{\sqrt{3}}{2}$	$-\frac{1}{2}$	$\sqrt{3}$	$-\frac{2\sqrt{3}}{3}$	- 2	$\frac{\sqrt{3}}{3}$
	$\frac{17\pi}{12}$	$-\frac{\sqrt{6}+\sqrt{2}}{4}$	$-\frac{\sqrt{6}-\sqrt{2}}{4}$	$\frac{\sqrt{3}+1}{\sqrt{3}-1}$	$\sqrt{2}-\sqrt{6}$	$-\sqrt{2}-\sqrt{6}$	$\frac{\sqrt{3}-1}{\sqrt{3}+1}$
Negative y-axis	$\frac{3\pi}{2}$	- 1	0	ND	- 1	ND	0
Fourth Quadrant	$\frac{19\pi}{12}$	$-\frac{\sqrt{6}+\sqrt{2}}{4}$	$\frac{\sqrt{6}-\sqrt{2}}{4}$	$-\frac{\sqrt{3}+1}{\sqrt{3}-1}$	$\sqrt{2}-\sqrt{6}$	$\sqrt{2}+\sqrt{6}$	$-\left(\frac{\sqrt{3}-1}{\sqrt{3}+1}\right)$
	$\frac{5\pi}{3}$	$-\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$-\sqrt{3}$	$-\frac{2\sqrt{3}}{3}$	2	$-\frac{\sqrt{3}}{3}$
	$\frac{7\pi}{4}$	$-\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	- 1	$-\sqrt{2}$	$\sqrt{2}$	- 1
	$\frac{11\pi}{6}$	$-\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$-\frac{\sqrt{3}}{3}$	- 2	$\frac{2\sqrt{3}}{3}$	$-\sqrt{3}$
	$\frac{23\pi}{12}$	$-\frac{\sqrt{6}-\sqrt{2}}{4}$	$\frac{\sqrt{6}+\sqrt{2}}{4}$	$-\frac{\sqrt{3}-1}{\sqrt{3}+1}$	$-\sqrt{2}-\sqrt{6}$	$\sqrt{6}-\sqrt{2}$	$-\left(\frac{\sqrt{3}+1}{\sqrt{3}-1}\right)$
Positive x-axis	**2π**	0	1	0	ND	1	ND