Valori noti degli angoli più comuni

*Di seguito sono riportati valori delle **funzioni dei principali angoli**; le frazione che presentano radicali sono state tutte razionalizzate, per cui eventuali radici compaiono solo al numeratore.*

Primo quadrante

$(0° < \alpha < 90°)$

angolo α		*funzioni*			
rad	*gradi*	*seno* (+)	*coseno* (+)	*tangente* (+)	*cotangente* (+)
0	$0°$	0	1	0	$[\pm\infty]$
$\frac{1}{12}\pi$	$15°$	$\frac{\sqrt{6}-\sqrt{2}}{4}$	$\frac{\sqrt{6}+\sqrt{2}}{4}$	$2-\sqrt{3}$	$2+\sqrt{3}$
$\frac{1}{10}\pi$	$18°$	$\frac{\sqrt{5}-1}{4}$	$\frac{\sqrt{10+2\sqrt{5}}}{4}$	$\frac{\sqrt{25-10\sqrt{5}}}{5}$	$\sqrt{5+2\sqrt{5}}$
$\frac{1}{8}\pi$	$22°\ 30'$	$\frac{\sqrt{2-\sqrt{2}}}{2}$	$\frac{\sqrt{2+\sqrt{2}}}{2}$	$\sqrt{2}-1$	$\sqrt{2}+1$
$\frac{1}{6}\pi$	$30°$	$\frac{1}{2} = 0{,}5$	$\frac{\sqrt{3}}{2} \approx 0{,}866$	$\frac{\sqrt{3}}{3} \approx 0{,}577$	$\sqrt{3} \approx 1{,}732$
$\frac{1}{5}\pi$	$36°$	$\frac{\sqrt{10-2\sqrt{5}}}{4}$	$\frac{\sqrt{5}+1}{4}$	$\sqrt{5-2\sqrt{5}}$	$\frac{\sqrt{25+10\sqrt{5}}}{5}$
$\frac{1}{4}\pi$	$45°$	$\frac{\sqrt{2}}{2} \approx 0{,}707$	$\frac{\sqrt{2}}{2} \approx 0{,}707$	1	1
$\frac{3}{10}\pi$	$54°$	$\frac{\sqrt{5}+1}{4}$	$\frac{\sqrt{10-2\sqrt{5}}}{4}$	$\frac{\sqrt{25+10\sqrt{5}}}{5}$	$\sqrt{5-2\sqrt{5}}$
$\frac{1}{3}\pi$	$60°$	$\frac{\sqrt{3}}{2} \approx 0{,}866$	$\frac{1}{2} = 0{,}5$	$\sqrt{3} \approx 1{,}732$	$\frac{\sqrt{3}}{3} \approx 0{,}577$
$\frac{3}{8}\pi$	$67°\ 30'$	$\frac{\sqrt{2+\sqrt{2}}}{2}$	$\frac{\sqrt{2-\sqrt{2}}}{2}$	$\sqrt{2}+1$	$\sqrt{2}-1$
$\frac{2}{5}\pi$	$72°$	$\frac{\sqrt{10+2\sqrt{5}}}{4}$	$\frac{\sqrt{5}-1}{4}$	$\sqrt{5+2\sqrt{5}}$	$\frac{\sqrt{25-10\sqrt{5}}}{5}$
$\frac{5}{12}\pi$	$75°$	$\frac{\sqrt{6}+\sqrt{2}}{4}$	$\frac{\sqrt{6}-\sqrt{2}}{4}$	$2+\sqrt{3}$	$2-\sqrt{3}$
$\frac{\pi}{2}$	$90°$	1	0	$[\pm\infty]$	0

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Secondo quadrante

$(90° < \alpha < 180°)$

angolo α		*funzioni*			
rad	*gradi*	*seno* (+)	*coseno* (–)	*tangente* (–)	*cotangente* (–)
$\frac{\pi}{2}$	90°	1	0	$[\pm\infty]$	0
$\frac{7}{12}\pi$	105°	$\frac{\sqrt{6}+\sqrt{2}}{4}$	$\frac{\sqrt{2}-\sqrt{6}}{4}$	$-2-\sqrt{3}$	$\sqrt{3}-2$
$\frac{3}{5}\pi$	108°	$\frac{\sqrt{10+2\sqrt{5}}}{4}$	$\frac{1-\sqrt{5}}{4}$	$-\sqrt{5+2\sqrt{5}}$	$-\frac{\sqrt{25-10\sqrt{5}}}{5}$
$\frac{5}{8}\pi$	112° 30'	$\frac{\sqrt{2+\sqrt{2}}}{2}$	$-\frac{\sqrt{2-\sqrt{2}}}{2}$	$-\sqrt{2}-1$	$1-\sqrt{2}$
$\frac{2}{3}\pi$	120°	$\frac{\sqrt{3}}{2} \approx 0{,}866$	$-\frac{1}{2} = -0{,}5$	$-\sqrt{3} \approx -1{,}732$	$-\frac{\sqrt{3}}{3} \approx -0{,}577$
$\frac{7}{10}\pi$	126°	$\frac{\sqrt{5}+1}{4}$	$-\frac{\sqrt{10-2\sqrt{5}}}{4}$	$-\frac{\sqrt{25+10\sqrt{5}}}{5}$	$-\sqrt{5-2\sqrt{5}}$
$\frac{3}{4}\pi$	135°	$\frac{\sqrt{2}}{2} \approx 0{,}707$	$-\frac{\sqrt{2}}{2} \approx -0{,}707$	-1	-1
$\frac{4}{5}\pi$	144°	$\frac{\sqrt{10-2\sqrt{5}}}{4}$	$-\frac{\sqrt{5}+1}{4}$	$-\sqrt{5-2\sqrt{5}}$	$-\frac{\sqrt{25+10\sqrt{5}}}{5}$
$\frac{5}{6}\pi$	150°	$\frac{1}{2} = 0{,}5$	$-\frac{\sqrt{3}}{2} \approx -0{,}866$	$-\frac{\sqrt{3}}{3} \approx -0{,}577$	$-\sqrt{3} \approx -1{,}732$
$\frac{7}{8}\pi$	157° 30'	$\frac{\sqrt{2-\sqrt{2}}}{2}$	$-\frac{\sqrt{2+\sqrt{2}}}{2}$	$1-\sqrt{2}$	$-\sqrt{2}-1$
$\frac{9}{10}\pi$	162°	$\frac{\sqrt{5}-1}{4}$	$-\frac{\sqrt{10+2\sqrt{5}}}{4}$	$-\frac{\sqrt{25-10\sqrt{5}}}{5}$	$-\sqrt{5+2\sqrt{5}}$
$\frac{11}{12}\pi$	165°	$\frac{\sqrt{6}-\sqrt{2}}{4}$	$-\frac{\sqrt{6}+\sqrt{2}}{4}$	$\sqrt{3}-2$	$-2-\sqrt{3}$
π	180°	0	-1	0	$[\pm\infty]$

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Terzo quadrante

$(180° < \alpha < 270°)$

angolo α		funzioni			
rad	gradi	seno (–)	coseno (–)	tangente (+)	cotangente (+)
π	180°	0	-1	0	$[\pm\infty]$
$\frac{13}{12}\pi$	195°	$\frac{\sqrt{2}-\sqrt{6}}{4}$	$-\frac{\sqrt{6}+\sqrt{2}}{4}$	$2-\sqrt{3}$	$2+\sqrt{3}$
$\frac{11}{10}\pi$	198°	$\frac{1-\sqrt{5}}{4}$	$-\frac{\sqrt{10+2\sqrt{5}}}{4}$	$\frac{\sqrt{25-10\sqrt{5}}}{5}$	$\sqrt{5+2\sqrt{5}}$
$\frac{9}{8}\pi$	202° 30'	$-\frac{\sqrt{2-\sqrt{2}}}{2}$	$-\frac{\sqrt{2+\sqrt{2}}}{2}$	$\sqrt{2}-1$	$\sqrt{2}+1$
$\frac{7}{6}\pi$	210°	$-\frac{1}{2} = -0{,}5$	$-\frac{\sqrt{3}}{2} \approx -0{,}866$	$\frac{\sqrt{3}}{3} \approx 0{,}577$	$\sqrt{3} \approx 1{,}732$
$\frac{6}{5}\pi$	216°	$-\frac{\sqrt{10-2\sqrt{5}}}{4}$	$-\frac{\sqrt{5}+1}{4}$	$\sqrt{5-2\sqrt{5}}$	$\frac{\sqrt{25+10\sqrt{5}}}{5}$
$\frac{5}{4}\pi$	225°	$-\frac{\sqrt{2}}{2} \approx -0{,}707$	$-\frac{\sqrt{2}}{2} \approx -0{,}707$	1	1
$\frac{13}{10}\pi$	234°	$-\frac{\sqrt{5}+1}{4}$	$-\frac{\sqrt{10-2\sqrt{5}}}{4}$	$\frac{\sqrt{25+10\sqrt{5}}}{5}$	$\sqrt{5-2\sqrt{5}}$
$\frac{4}{3}\pi$	240°	$-\frac{\sqrt{3}}{2} \approx -0{,}866$	$-\frac{1}{2} = -0{,}5$	$\sqrt{3} \approx 1{,}732$	$\frac{\sqrt{3}}{3} \approx 0{,}577$
$\frac{11}{8}\pi$	247° 30'	$-\frac{\sqrt{2+\sqrt{2}}}{2}$	$-\frac{\sqrt{2-\sqrt{2}}}{2}$	$\sqrt{2}+1$	$\sqrt{2}-1$
$\frac{7}{5}\pi$	252°	$-\frac{\sqrt{10+2\sqrt{5}}}{4}$	$\frac{1-\sqrt{5}}{4}$	$\sqrt{5+2\sqrt{5}}$	$\frac{\sqrt{25-10\sqrt{5}}}{5}$
$\frac{17}{12}\pi$	255°	$-\frac{\sqrt{6}+\sqrt{2}}{4}$	$\frac{\sqrt{2}-\sqrt{6}}{4}$	$2+\sqrt{3}$	$2-\sqrt{3}$
$\frac{3}{2}\pi$	270°	-1	0	$[\pm\infty]$	0

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Valori noti degli angoli più comuni

Quarto quadrante

$(270° < \alpha < 360°)$

angolo α		funzioni			
rad	gradi	seno (–)	coseno (+)	tangente (–)	cotangente (–)
$\frac{3}{2}\pi$	270°	-1	0	$[\pm\infty]$	0
$\frac{19}{12}\pi$	285°	$-\frac{\sqrt{6}+\sqrt{2}}{4}$	$\frac{\sqrt{6}-\sqrt{2}}{4}$	$-2-\sqrt{3}$	$\sqrt{3}-2$
$\frac{8}{5}\pi$	288°	$-\frac{\sqrt{10+2\sqrt{5}}}{4}$	$\frac{\sqrt{5}-1}{4}$	$-\sqrt{5+2\sqrt{5}}$	$-\frac{\sqrt{25-10\sqrt{5}}}{5}$
$\frac{13}{8}\pi$	292° 30'	$-\frac{\sqrt{2+\sqrt{2}}}{2}$	$\frac{\sqrt{2-\sqrt{2}}}{2}$	$-\sqrt{2}-1$	$1-\sqrt{2}$
$\frac{5}{3}\pi$	300°	$-\frac{\sqrt{3}}{2} \approx -0{,}866$	$\frac{1}{2} = 0{,}5$	$-\sqrt{3} \approx -1{,}732$	$-\frac{\sqrt{3}}{3} \approx -0{,}577$
$\frac{17}{10}\pi$	306°	$-\frac{\sqrt{5}+1}{4}$	$\frac{\sqrt{10-2\sqrt{5}}}{4}$	$-\frac{\sqrt{25+10\sqrt{5}}}{5}$	$-\sqrt{5-2\sqrt{5}}$
$\frac{7}{4}\pi$	315°	$-\frac{\sqrt{2}}{2} \approx -0{,}707$	$\frac{\sqrt{2}}{2} \approx 0{,}707$	-1	-1
$\frac{9}{5}\pi$	324°	$-\frac{\sqrt{10-2\sqrt{5}}}{4}$	$\frac{\sqrt{5}+1}{4}$	$-\sqrt{5-2\sqrt{5}}$	$-\frac{\sqrt{25+10\sqrt{5}}}{5}$
$\frac{11}{6}\pi$	330°	$-\frac{1}{2} = -0{,}5$	$\frac{\sqrt{3}}{2} \approx 0{,}866$	$-\frac{\sqrt{3}}{3} \approx -0{,}577$	$-\sqrt{3} \approx -1{,}732$
$\frac{15}{8}\pi$	337° 30'	$-\frac{\sqrt{2-\sqrt{2}}}{2}$	$\frac{\sqrt{2+\sqrt{2}}}{2}$	$1-\sqrt{2}$	$-\sqrt{2}-1$
$\frac{19}{10}\pi$	342°	$\frac{1-\sqrt{5}}{4}$	$\frac{\sqrt{10+2\sqrt{5}}}{4}$	$-\frac{\sqrt{25-10\sqrt{5}}}{5}$	$-\sqrt{5+2\sqrt{5}}$
$\frac{23}{12}\pi$	345°	$\frac{\sqrt{2}-\sqrt{6}}{4}$	$\frac{\sqrt{6}+\sqrt{2}}{4}$	$\sqrt{3}-2$	$-2-\sqrt{3}$
2π	360°	0	1	0	$[\pm\infty]$

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