Maxima

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Maxima
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Simplify[FunctionExpand[Sin[15 Degree]]]
Simplify[FunctionExpand[Sin[6 Degree]]]
Maxima
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\renewcommand{\arraystretch}{*.**}

$\theta(°)$	θ (rad)	$\sin(\theta)$	Maxima	float
0°	0	0	0	0.000000000000000
3°	$\frac{\pi}{60}$	$-\frac{(2\sqrt{3}-2)\sqrt{\sqrt{5}+5}+(-\sqrt{2}\sqrt{3}-\sqrt{2})\sqrt{5}+\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$	-((2*sqrt(3)-2)*sqrt(sqrt(5)+5)+(-sqrt(2)*sqrt(3)-sqrt(2))*sqrt(5)+sqrt(2)*sqrt(3)+sqrt(2))/16	0.052335956242944
6°	$\frac{\pi}{30}$	$\frac{\sqrt{3}(\sqrt{5}-1)\sqrt{2\sqrt{5}+10}-2\sqrt{5}-2}{16}$	(sqrt(3)*(sqrt(5)-1)*sqrt(2*sqrt(5)+10)-2*sqrt(5)-2)/16	0.104528463267654
9°	$\frac{\pi}{20}$	$-\frac{(\sqrt{5}-1)\sqrt{\sqrt{5}+5}-\sqrt{2}\sqrt{5}-\sqrt{2}}{8}$	-((sqrt(5)-1)*sqrt(sqrt(5)+5)-sqrt(2)*sqrt(5)-sqrt(2))/8	0.156434465040231
12°	$\frac{\pi}{15}$	$\frac{\sqrt{2}\sqrt{\sqrt{5}+5}-\sqrt{3}\sqrt{5}+\sqrt{3}}{8}$	(sqrt(2)*sqrt(sqrt(5)+5)-sqrt(3)*sqrt(5)+sqrt(3))/8	0.207911690817759
15°	$\frac{\pi}{12}$	$\frac{\sqrt{2}\sqrt{3}-\sqrt{2}}{4}$	(sqrt(2)*sqrt(3)-sqrt(2))/4	0.258819045102521
18°	$\frac{\pi}{10}$	$\frac{\sqrt{5}-1}{4}$	(sqrt(5)-1)/4	0.309016994374947
21°	$\frac{7\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}\left((\sqrt{3}+1)\sqrt{5}-\sqrt{3}-1\right)+(\sqrt{2}-\sqrt{2}\sqrt{3})\sqrt{5}-\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$	(sqrt(sqrt(5)+5)*((sqrt(3)+1)*sqrt(5)-sqrt(3)-1)+(sqrt(2)-sqrt(2)*sqrt(3))*sqrt(5)-sqrt(2)*sqrt(3)+sqrt(2))/16	0.358367949545300
24°	$\frac{2\pi}{15}$	$\frac{\sqrt{\sqrt{5}+5}(\sqrt{2}\sqrt{5}-2\sqrt{2})+\sqrt{3}\sqrt{5}-\sqrt{3}}{8}$	-(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)-sqrt(2))-2*sqrt(3)*sqrt(5)-2*sqrt(3))/16	0.406736643075800
27°	$\frac{3\pi}{20}$	$\frac{2\sqrt{\sqrt{5}+5}-\sqrt{2}\sqrt{5}+\sqrt{2}}{8}$	(2*sqrt(sqrt(5)+5)-sqrt(2)*sqrt(5)+sqrt(2))/8	0.453990499739547
30°	$\frac{\pi}{6}$	$\frac{1}{2}$	1/2	0.500000000000000
33°	$\frac{11\pi}{60}$	$\frac{(2\sqrt{3}-2)\sqrt{\sqrt{5}+5}+(\sqrt{2}\sqrt{3}+\sqrt{2})\sqrt{5}-\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$	((2*sqrt(3)-2)*sqrt(sqrt(5)+5)+(sqrt(2)*sqrt(3)+sqrt(2))*sqrt(5)-sqrt(2)*sqrt(3)-sqrt(2))/16	0.544639035015027
36°	$\frac{\pi}{5}$	$\frac{\sqrt{\sqrt{5}+5}(\sqrt{2}\sqrt{5}-\sqrt{2})}{8}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)-sqrt(2)))/8	0.587785252292473
39°	$\frac{13\pi}{60}$	$-\frac{\sqrt{\sqrt{5}+5}\left((\sqrt{3}-1)\sqrt{5}-\sqrt{3}+1\right)+(-\sqrt{2}\sqrt{3}-\sqrt{2})\sqrt{5}-\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$	-(sqrt(sqrt(5)+5)*((sqrt(3)-1)*sqrt(5)-sqrt(3)+1)+(-sqrt(2)*sqrt(3)-sqrt(2))*sqrt(5)-sqrt(2)*sqrt(3)-sqrt(2))/16	0.629320391049838
42°	$\frac{7\pi}{30}$	$\frac{\sqrt{2}\sqrt{3}\sqrt{\sqrt{5}+5}-\sqrt{5}+1}{8}$	(sqrt(2)*sqrt(3)*sqrt(sqrt(5)+5)-sqrt(5)+1)/8	0.669130606358858
45°	$\frac{\pi}{4}$	$\frac{\sqrt{2}}{2}$	sqrt(2)/2	0.707106781186547
48°	$\frac{4\pi}{15}$	$\frac{\sqrt{2}\sqrt{\sqrt{5}+5}+\sqrt{3}\sqrt{5}-\sqrt{3}}{8}$	(sqrt(2)*sqrt(sqrt(5)+5)+sqrt(3)*sqrt(5)-sqrt(3))/8	0.743144825477394
51°	$\frac{17\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}\left((\sqrt{3}+1)\sqrt{5}-\sqrt{3}-1\right)+(\sqrt{2}\sqrt{3}-\sqrt{2})\sqrt{5}+\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$	(sqrt(sqrt(5)+5)*((sqrt(3)+1)*sqrt(5)-sqrt(3)-1)+(sqrt(2)*sqrt(3)-sqrt(2))*sqrt(5)+sqrt(2)*sqrt(3)-sqrt(2))/16	0.777145961456971
54°	$\frac{3\pi}{10}$	$\frac{\sqrt{5}+1}{4}$	(sqrt(5)+1)/4	0.809016994374947
57°	$\frac{19\pi}{60}$	$\frac{(2\sqrt{3}+2)\sqrt{\sqrt{5}+5}+(\sqrt{2}-\sqrt{2}\sqrt{3})\sqrt{5}+\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$	((2*sqrt(3)+2)*sqrt(sqrt(5)+5)+(sqrt(2)-sqrt(2)*sqrt(3))*sqrt(5)+sqrt(2)*sqrt(3)-sqrt(2))/16	0.838670567945424
60°	$\frac{\pi}{3}$	$\frac{\sqrt{3}}{2}$	sqrt(3)/2	0.866025403784439
63°	$\frac{7\pi}{20}$	$\frac{2\sqrt{\sqrt{5}+5}+\sqrt{2}\sqrt{5}-\sqrt{2}}{8}$	(2*sqrt(sqrt(5)+5)+sqrt(2)*sqrt(5)-sqrt(2))/8	0.891006524188368
66°	$\frac{11\pi}{30}$	$\frac{\sqrt{\sqrt{5}+5}(\sqrt{2}\sqrt{3}\sqrt{5}-\sqrt{2}\sqrt{3})+2\sqrt{5}+2}{16}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(3)*sqrt(5)-sqrt(2)*sqrt(3))+2*sqrt(5)+2)/16	0.913545457642601
69°	$\frac{23\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}\left((\sqrt{3}-1)\sqrt{5}-\sqrt{3}+1\right)+(\sqrt{2}\sqrt{3}+\sqrt{2})\sqrt{5}+\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$	(sqrt(sqrt(5)+5)*((sqrt(3)-1)*sqrt(5)-sqrt(3)+1)+(sqrt(2)*sqrt(3)+sqrt(2))*sqrt(5)+sqrt(2)*sqrt(3)+sqrt(2))/16	0.933580426497202
72°	$\frac{2\pi}{5}$	$\frac{\sqrt{2\sqrt{5}+10}}{4}$	(sqrt(2)*sqrt(sqrt(5)+5))/4	0.951056516295154
75°	$\frac{5\pi}{12}$	$\frac{\sqrt{2}\sqrt{3}+\sqrt{2}}{4}$	(sqrt(2)*sqrt(3)+sqrt(2))/4	0.965925826289068
78°	$\frac{13\pi}{30}$	$\frac{\sqrt{\sqrt{5}+5}(\sqrt{2}\sqrt{3}\sqrt{5}-\sqrt{2}\sqrt{3})+2\sqrt{5}+2}{16}$	(sqrt(2)*sqrt(3)*sqrt(sqrt(5)+5)+sqrt(5)-1)/8	0.978147600733806
81°	$\frac{9\pi}{20}$	$\frac{(\sqrt{5}-1)\sqrt{\sqrt{5}+5}+\sqrt{2}\sqrt{5}+\sqrt{2}}{8}$	((sqrt(5)-1)*sqrt(sqrt(5)+5)+sqrt(2)*sqrt(5)+sqrt(2))/8	0.987688340595138
84°	$\frac{7\pi}{15}$	$\frac{(\sqrt{2}\sqrt{5}+\sqrt{2})\sqrt{6}+(\sqrt{5}-1)\sqrt{2\sqrt{5}+10}}{16}$	((sqrt(2)*sqrt(5)+sqrt(2))*sqrt(6)+(sqrt(5)-1)*sqrt(2*sqrt(5)+10))/16	0.994521895368273
87°	$\frac{29\pi}{60}$	$\frac{(2\sqrt{3}+2)\sqrt{\sqrt{5}+5}+(\sqrt{2}\sqrt{3}-\sqrt{2})\sqrt{5}-\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$	((2*sqrt(3)+2)*sqrt(sqrt(5)+5)+(sqrt(2)*sqrt(3)-sqrt(2))*sqrt(5)-sqrt(2)*sqrt(3)+sqrt(2))/16	0.998629534754574
90°	$\frac{\pi}{2}$	1	1	1.000000000000000

1   $\sin\theta$

$\theta(°)$	θ (rad)	$\cos(\theta)$	Maxima	float
0°	0	1	1	1.000000000000000
3°	$\frac{\pi}{60}$	$\frac{(2\sqrt{3}+2)\sqrt{\sqrt{5}+5}+(\sqrt{2}\sqrt{3}-\sqrt{2})\sqrt{5}-\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$	((2*sqrt(3)+2)*sqrt(sqrt(5)+5)+(sqrt(2)*sqrt(3)-sqrt(2))*sqrt(5)-sqrt(2)*sqrt(3)+sqrt(2))/16	0.998629534754574
6°	$\frac{\pi}{30}$	$\frac{(\sqrt{2}\sqrt{5}+\sqrt{2})\sqrt{6}+(\sqrt{5}-1)\sqrt{2\sqrt{5}+10}}{16}$	((sqrt(2)*sqrt(5)+sqrt(2))*sqrt(6)+(sqrt(5)-1)*sqrt(2*sqrt(5)+10))/16	0.994521895368273
9°	$\frac{\pi}{20}$	$\frac{(\sqrt{5}-1)\sqrt{\sqrt{5}+5}+\sqrt{2}\sqrt{5}+\sqrt{2}}{8}$	((sqrt(5)-1)*sqrt(sqrt(5)+5)+sqrt(2)*sqrt(5)+sqrt(2))/8	0.987688340595138
12°	$\frac{\pi}{15}$	$\frac{\sqrt{\sqrt{5}+5}(\sqrt{2}\sqrt{3}\sqrt{5}-\sqrt{2}\sqrt{3})+2\sqrt{5}+2}{16}$	(sqrt(2)*sqrt(3)*sqrt(sqrt(5)+5)+sqrt(5)-1)/8	0.978147600733806
15°	$\frac{\pi}{12}$	$\frac{\sqrt{2}\sqrt{3}+\sqrt{2}}{4}$	(sqrt(2)*sqrt(3)+sqrt(2))/4	0.965925826289068
18°	$\frac{\pi}{10}$	$\frac{\sqrt{2\sqrt{5}+10}}{4}$	(sqrt(2)*sqrt(sqrt(5)+5))/4	0.951056516295154
21°	$\frac{7\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}((\sqrt{3}-1)\sqrt{5}-\sqrt{3}+1)+(\sqrt{2}\sqrt{3}+\sqrt{2})\sqrt{5}+\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$	(sqrt(sqrt(5)+5)*((sqrt(3)-1)*sqrt(5)-sqrt(3)+1)+(sqrt(2)*sqrt(3)+sqrt(2))*sqrt(5)+sqrt(2)*sqrt(3)+sqrt(2))/16	0.933580426497202
24°	$\frac{2\pi}{15}$	$\frac{\sqrt{\sqrt{5}+5}(\sqrt{2}\sqrt{3}\sqrt{5}-\sqrt{2}\sqrt{3})+2\sqrt{5}+2}{16}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(3)*sqrt(5)-sqrt(2)*sqrt(3))+2*sqrt(5)+2)/16	0.913545457642601
27°	$\frac{3\pi}{20}$	$\frac{2\sqrt{\sqrt{5}+5}+\sqrt{2}\sqrt{5}-\sqrt{2}}{8}$	(2*sqrt(sqrt(5)+5)+sqrt(2)*sqrt(5)-sqrt(2))/8	0.891006524188368
30°	$\frac{\pi}{6}$	$\frac{\sqrt{3}}{2}$	sqrt(3)/2	0.866025403784439
33°	$\frac{11\pi}{60}$	$\frac{(2\sqrt{3}+2)\sqrt{\sqrt{5}+5}+(\sqrt{2}-\sqrt{2}\sqrt{3})\sqrt{5}+\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$	((2*sqrt(3)+2)*sqrt(sqrt(5)+5)+(sqrt(2)-sqrt(2)*sqrt(3))*sqrt(5)+sqrt(2)*sqrt(3)-sqrt(2))/16	0.838670567945424
36°	$\frac{\pi}{5}$	$\frac{\sqrt{5}+1}{4}$	(sqrt(5)+1)/4	0.809016994374947
39°	$\frac{13\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}((\sqrt{3}+1)\sqrt{5}-\sqrt{3}-1)+(\sqrt{2}\sqrt{3}-\sqrt{2})\sqrt{5}+\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$	(sqrt(sqrt(5)+5)*((sqrt(3)+1)*sqrt(5)-sqrt(3)-1)+(sqrt(2)*sqrt(3)-sqrt(2))*sqrt(5)+sqrt(2)*sqrt(3)-sqrt(2))/16	0.777145961456971
42°	$\frac{7\pi}{30}$	$\frac{\sqrt{2}\sqrt{\sqrt{5}+5}+\sqrt{3}\sqrt{5}-\sqrt{3}}{8}$	(sqrt(2)*sqrt(sqrt(5)+5)+sqrt(3)*sqrt(5)-sqrt(3))/8	0.743144825477394
45°	$\frac{\pi}{4}$	$\frac{\sqrt{2}}{2}$	sqrt(2)/2	0.707106781186547
48°	$\frac{4\pi}{15}$	$\frac{\sqrt{2}\sqrt{3}\sqrt{\sqrt{5}+5}-\sqrt{5}+1}{8}$	(sqrt(2)*sqrt(3)*sqrt(sqrt(5)+5)-sqrt(5)+1)/8	0.669130606358858
51°	$\frac{17\pi}{60}$	$-\frac{\sqrt{\sqrt{5}+5}((\sqrt{3}-1)\sqrt{5}-\sqrt{3}+1)+(-\sqrt{2}\sqrt{3}-\sqrt{2})\sqrt{5}-\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$	-(sqrt(sqrt(5)+5)*((sqrt(3)-1)*sqrt(5)-sqrt(3)+1)+(-sqrt(2)*sqrt(3)-sqrt(2))*sqrt(5)-sqrt(2)*sqrt(3)-sqrt(2))/16	0.629320391049838
54°	$\frac{3\pi}{10}$	$\frac{\sqrt{\sqrt{5}+5}(\sqrt{2}\sqrt{5}-\sqrt{2})}{8}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)-sqrt(2)))/8	0.587785252292473
57°	$\frac{19\pi}{60}$	$\frac{(2\sqrt{3}-2)\sqrt{\sqrt{5}+5}+(\sqrt{2}\sqrt{3}+\sqrt{2})\sqrt{5}-\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$	((2*sqrt(3)-2)*sqrt(sqrt(5)+5)+(sqrt(2)*sqrt(3)+sqrt(2))*sqrt(5)-sqrt(2)*sqrt(3)-sqrt(2))/16	0.544639035015027
60°	$\frac{\pi}{3}$	$\frac{1}{2}$	1/2	0.500000000000000
63°	$\frac{7\pi}{20}$	$\frac{2\sqrt{\sqrt{5}+5}-\sqrt{2}\sqrt{5}+\sqrt{2}}{8}$	(2*sqrt(sqrt(5)+5)-sqrt(2)*sqrt(5)+sqrt(2))/8	0.453990499739547
66°	$\frac{11\pi}{30}$	$\frac{\sqrt{\sqrt{5}+5}(\sqrt{2}\sqrt{5}-2\sqrt{2})+\sqrt{3}\sqrt{5}-\sqrt{3}}{8}$	-(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)-sqrt(2))-2*sqrt(3)*sqrt(5)-2*sqrt(3))/16	0.406736643075800
69°	$\frac{23\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}((\sqrt{3}+1)\sqrt{5}-\sqrt{3}-1)+(\sqrt{2}-\sqrt{2}\sqrt{3})\sqrt{5}-\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$	(sqrt(sqrt(5)+5)*((sqrt(3)+1)*sqrt(5)-sqrt(3)-1)+(sqrt(2)-sqrt(2)*sqrt(3))*sqrt(5)-sqrt(2)*sqrt(3)+sqrt(2))/16	0.358367949545300
72°	$\frac{2\pi}{5}$	$\frac{\sqrt{5}-1}{4}$	(sqrt(5)-1)/4	0.309016994374947
75°	$\frac{5\pi}{12}$	$\frac{\sqrt{2}\sqrt{3}-\sqrt{2}}{4}$	(sqrt(2)*sqrt(3)-sqrt(2))/4	0.258819045102521
78°	$\frac{13\pi}{30}$	$\frac{\sqrt{2}\sqrt{\sqrt{5}+5}-\sqrt{3}\sqrt{5}+\sqrt{3}}{8}$	(sqrt(2)*sqrt(sqrt(5)+5)-sqrt(3)*sqrt(5)+sqrt(3))/8	0.207911690817759
81°	$\frac{9\pi}{20}$	$-\frac{(\sqrt{5}-1)\sqrt{\sqrt{5}+5}-\sqrt{2}\sqrt{5}-\sqrt{2}}{8}$	-((sqrt(5)-1)*sqrt(sqrt(5)+5)-sqrt(2)*sqrt(5)-sqrt(2))/8	0.156434465040231
84°	$\frac{7\pi}{15}$	$\frac{\sqrt{3}(\sqrt{5}-1)\sqrt{2\sqrt{5}+10}-2\sqrt{5}-2}{16}$	(sqrt(3)*(sqrt(5)-1)*sqrt(2*sqrt(5)+10)-2*sqrt(5)-2)/16	0.104528463267654
87°	$\frac{29\pi}{60}$	$-\frac{(2\sqrt{3}-2)\sqrt{\sqrt{5}+5}+(-\sqrt{2}\sqrt{3}-\sqrt{2})\sqrt{5}+\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$	-((2*sqrt(3)-2)*sqrt(sqrt(5)+5)+(-sqrt(2)*sqrt(3)-sqrt(2))*sqrt(5)+sqrt(2)*sqrt(3)+sqrt(2))/16	0.052335956242944
90°	$\frac{\pi}{2}$	0	0	0.000000000000000

$\theta(°)$	θ (rad)	$\tan(\theta)$	Maxima	float
0°	0	0	0	0
3°	$\frac{\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{2}\sqrt{3}-\sqrt{2}\right)\sqrt{5}+\sqrt{2}\sqrt{3}-3\sqrt{2}\right)+\left(4-2\sqrt{3}\right)\sqrt{5}-6\sqrt{3}+8}{4}$	(sqrt(sqrt(5)+5)*((sqrt(2)*sqrt(3)-sqrt(2))*sqrt(5)+sqrt(2)*sqrt(3)-3*sqrt(2))+(4-2*sqrt(3))*sqrt(5)-6*sqrt(3)+8)/4	0.052407779283042
6°	$\frac{\pi}{30}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}-\sqrt{2}\right)-2\sqrt{3}\sqrt{5}+2\sqrt{3}}{4}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)-sqrt(2))-2*sqrt(3)*sqrt(5)+2*sqrt(3))/4	0.105104235265677
9°	$\frac{\pi}{20}$	$-\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}+\sqrt{2}\right)-4\sqrt{5}-4}{4}$	-(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)+sqrt(2))-4*sqrt(5)-4)/4	0.158384440324536
12°	$\frac{\pi}{15}$	$-\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}-2\sqrt{2}\right)+\sqrt{3}\sqrt{5}-3\sqrt{3}}{2}$	-(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)-2*sqrt(2))+sqrt(3)*sqrt(5)-3*sqrt(3))/2	0.212556561670022
15°	$\frac{\pi}{12}$	$2-\sqrt{3}$	2-sqrt(3)	0.267949192431123
18°	$\frac{\pi}{10}$	$\frac{\sqrt{\sqrt{5}+5}\left(3\sqrt{2}\sqrt{5}-5\sqrt{2}\right)}{20}$	(sqrt(sqrt(5)+5)*(3*sqrt(2)*sqrt(5)-5*sqrt(2)))/20	0.324919696232907
21°	$\frac{7\pi}{60}$	$-\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{2}\sqrt{3}+2\sqrt{2}\right)\sqrt{5}-3\sqrt{2}\sqrt{3}-4\sqrt{2}\right)+\left(-2\sqrt{3}-4\right)\sqrt{5}+6\sqrt{3}+8}{4}$	-(sqrt(sqrt(5)+5)*((sqrt(2)*sqrt(3)+2*sqrt(2))*sqrt(5)-3*sqrt(2)*sqrt(3)-4*sqrt(2))+(-2*sqrt(3)-4)*sqrt(5)+6*sqrt(3)+8)/4	0.383864035035415
24°	$\frac{2\pi}{15}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}+3\sqrt{2}\right)-2\sqrt{3}\sqrt{5}-6\sqrt{3}}{4}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)+3*sqrt(2))-2*sqrt(3)*sqrt(5)-6*sqrt(3))/4	0.445228685308537
27°	$\frac{3\pi}{20}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}-3\sqrt{2}\right)+4\sqrt{5}-4}{4}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)-3*sqrt(2))+4*sqrt(5)-4)/4	0.509525449494429
30°	$\frac{\pi}{6}$	$\frac{\sqrt{3}}{3}$	sqrt(3)/3	0.577350269189626
33°	$\frac{11\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{2}\sqrt{3}-\sqrt{2}\right)\sqrt{5}+\sqrt{2}\sqrt{3}-3\sqrt{2}\right)+\left(2\sqrt{3}-4\right)\sqrt{5}+6\sqrt{3}-8}{4}$	(sqrt(sqrt(5)+5)*((sqrt(2)*sqrt(3)-sqrt(2))*sqrt(5)+sqrt(2)*sqrt(3)-3*sqrt(2))+(2*sqrt(3)-4)*sqrt(5)+6*sqrt(3)-8)/4	0.649407593197511
36°	$\frac{\pi}{5}$	$-\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}-3\sqrt{2}\right)}{4}$	-(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)-3*sqrt(2)))/4	0.726542528005361
39°	$\frac{13\pi}{60}$	$-\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{2}\sqrt{3}-2\sqrt{2}\right)\sqrt{5}-3\sqrt{2}\sqrt{3}+4\sqrt{2}\right)+\left(4-2\sqrt{3}\right)\sqrt{5}+6\sqrt{3}-8}{4}$	-(sqrt(sqrt(5)+5)*((sqrt(2)*sqrt(3)-2*sqrt(2))*sqrt(5)-3*sqrt(2)*sqrt(3)+4*sqrt(2))+(4-2*sqrt(3))*sqrt(5)+6*sqrt(3)-8)/4	0.809784033195007
42°	$\frac{7\pi}{30}$	$-\frac{\sqrt{2}\sqrt{\sqrt{5}+5}-\sqrt{3}\sqrt{5}-\sqrt{3}}{2}$	-(sqrt(2)*sqrt(sqrt(5)+5)-sqrt(3)*sqrt(5)-sqrt(3))/2	0.900040404297840
45°	$\frac{\pi}{4}$	1	1	1.000000000000000
48°	$\frac{4\pi}{15}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}-2\sqrt{2}\right)-\sqrt{3}\sqrt{5}+3\sqrt{3}}{2}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)-2*sqrt(2))-sqrt(3)*sqrt(5)+3*sqrt(3))/2	1.110612514829190
51°	$\frac{17\pi}{60}$	$-\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{2}\sqrt{3}+2\sqrt{2}\right)\sqrt{5}-3\sqrt{2}\sqrt{3}-4\sqrt{2}\right)+\left(2\sqrt{3}+4\right)\sqrt{5}-6\sqrt{3}-8}{4}$	-(sqrt(sqrt(5)+5)*((sqrt(2)*sqrt(3)+2*sqrt(2))*sqrt(5)-3*sqrt(2)*sqrt(3)-4*sqrt(2))+(2*sqrt(3)+4)*sqrt(5)-6*sqrt(3)-8)/4	1.234897156535050
54°	$\frac{3\pi}{10}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}+5\sqrt{2}\right)}{20}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)+5*sqrt(2)))/20	1.376381920471170
57°	$\frac{19\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{2}\sqrt{3}+\sqrt{2}\right)\sqrt{5}+\sqrt{2}\sqrt{3}+3\sqrt{2}\right)+\left(-2\sqrt{3}-4\right)\sqrt{5}-6\sqrt{3}-8}{4}$	(sqrt(sqrt(5)+5)*((sqrt(2)*sqrt(3)+sqrt(2))*sqrt(5)+sqrt(2)*sqrt(3)+3*sqrt(2))+(-2*sqrt(3)-4)*sqrt(5)-6*sqrt(3)-8)/4	1.539864963814590
60°	$\frac{\pi}{3}$	$\sqrt{3}$	sqrt(3)	1.732050807568880
63°	$\frac{7\pi}{20}$	$-\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}-3\sqrt{2}\right)-4\sqrt{5}+4}{4}$	-(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)-3*sqrt(2))-4*sqrt(5)+4)/4	1.962610505505150
66°	$\frac{11\pi}{30}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}-\sqrt{2}\right)+2\sqrt{3}\sqrt{5}-2\sqrt{3}}{4}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)-sqrt(2))+2*sqrt(3)*sqrt(5)-2*sqrt(3))/4	2.246036773904220
69°	$\frac{23\pi}{60}$	$-\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{2}\sqrt{3}-2\sqrt{2}\right)\sqrt{5}-3\sqrt{2}\sqrt{3}+4\sqrt{2}\right)+\left(2\sqrt{3}-4\right)\sqrt{5}-6\sqrt{3}+8}{4}$	-(sqrt(sqrt(5)+5)*((sqrt(2)*sqrt(3)-2*sqrt(2))*sqrt(5)-3*sqrt(2)*sqrt(3)+4*sqrt(2))+(2*sqrt(3)-4)*sqrt(5)-6*sqrt(3)+8)/4	2.605089064693800
72°	$\frac{2\pi}{5}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}+\sqrt{2}\right)}{4}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)+sqrt(2)))/4	3.077768537175250
75°	$\frac{5\pi}{12}$	$\sqrt{3}+2$	sqrt(3)+2	3.732050807568880
78°	$\frac{13\pi}{30}$	$\frac{\sqrt{2}\sqrt{\sqrt{5}+5}+\sqrt{3}\sqrt{5}+\sqrt{3}}{2}$	(sqrt(2)*sqrt(sqrt(5)+5)+sqrt(3)*sqrt(5)+sqrt(3))/2	4.704630109478450
81°	$\frac{9\pi}{20}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}+\sqrt{2}\right)+4\sqrt{5}+4}{4}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)+sqrt(2))+4*sqrt(5)+4)/4	6.313751514675040
84°	$\frac{7\pi}{15}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}+3\sqrt{2}\right)+2\sqrt{3}\sqrt{5}+6\sqrt{3}}{4}$	(sqrt(sqrt(5)+5)*(sqrt(2)*sqrt(5)+3*sqrt(2))+2*sqrt(3)*sqrt(5)+6*sqrt(3))/4	9.514364454222590
87°	$\frac{29\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{2}\sqrt{3}+\sqrt{2}\right)\sqrt{5}+\sqrt{2}\sqrt{3}+3\sqrt{2}\right)+\left(2\sqrt{3}+4\right)\sqrt{5}+6\sqrt{3}+8}{4}$	(sqrt(sqrt(5)+5)*((sqrt(2)*sqrt(3)+sqrt(2))*sqrt(5)+sqrt(2)*sqrt(3)+3*sqrt(2))+(2*sqrt(3)+4)*sqrt(5)+6*sqrt(3)+8)/4	19.081136687728200
90°	$\frac{\pi}{2}$			

3 $\tan\theta$

$\theta(°)$	θ (rad)	$\sin\theta$(T_EX)
0°	0	0
3°	$\frac{\pi}{60}$	`$-\frac{\left( 2\sqrt{3}-2\right) \sqrt{\sqrt{5}+5}+\left( -\sqrt{2}\sqrt{3}-\sqrt{2}\right) \sqrt{5}+\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$`
6°	$\frac{\pi}{30}$	`$\frac{\sqrt{3}\left( \sqrt{5}-1\right) \sqrt{2\sqrt{5}+10}-2\sqrt{5}-2}{16}$`
9°	$\frac{\pi}{20}$	`$-\frac{\left( \sqrt{5}-1\right) \sqrt{\sqrt{5}+5}-\sqrt{2}\sqrt{5}-\sqrt{2}}{8}$`
12°	$\frac{\pi}{15}$	`$\frac{\sqrt{2}\sqrt{\sqrt{5}+5}-\sqrt{3}\sqrt{5}+\sqrt{3}}{8}$`
15°	$\frac{\pi}{12}$	`$\frac{\sqrt{2}\sqrt{3}-\sqrt{2}}{4}$`
18°	$\frac{\pi}{10}$	`$\frac{\sqrt{5}-1}{4}$`
21°	$\frac{7\pi}{60}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{3}+1\right) \sqrt{5}-\sqrt{3}-1\right) +\left( \sqrt{2}-\sqrt{2}\sqrt{3}\right) \sqrt{5}-\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$`
24°	$\frac{2\pi}{15}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}-2\sqrt{2}\right) +\sqrt{3}\sqrt{5}-\sqrt{3}}{8}$`
27°	$\frac{3\pi}{20}$	`$\frac{2\sqrt{\sqrt{5}+5}-\sqrt{2}\sqrt{5}+\sqrt{2}}{8}$`
30°	$\frac{\pi}{6}$	`$\frac{1}{2}$`
33°	$\frac{11\pi}{60}$	`$\frac{\left( 2\sqrt{3}-2\right) \sqrt{\sqrt{5}+5}+\left( \sqrt{2}\sqrt{3}+\sqrt{2}\right) \sqrt{5}-\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$`
36°	$\frac{\pi}{5}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}-\sqrt{2}\right) }{8}$`
39°	$\frac{13\pi}{60}$	`$-\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{3}-1\right) \sqrt{5}-\sqrt{3}+1\right) +\left( -\sqrt{2}\sqrt{3}-\sqrt{2}\right) \sqrt{5}-\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$`
42°	$\frac{7\pi}{30}$	`$\frac{\sqrt{2}\sqrt{3}\sqrt{\sqrt{5}+5}-\sqrt{5}+1}{8}$`
45°	$\frac{\pi}{4}$	`$\frac{\sqrt{2}}{2}$`
48°	$\frac{4\pi}{15}$	`$\frac{\sqrt{2}\sqrt{\sqrt{5}+5}+\sqrt{3}\sqrt{5}-\sqrt{3}}{8}$`
51°	$\frac{17\pi}{60}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{3}+1\right) \sqrt{5}-\sqrt{3}-1\right) +\left( \sqrt{2}\sqrt{3}-\sqrt{2}\right) \sqrt{5}+\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$`
54°	$\frac{3\pi}{10}$	`$\frac{\sqrt{5}+1}{4}$`
57°	$\frac{19\pi}{60}$	`$\frac{\left( 2\sqrt{3}+2\right) \sqrt{\sqrt{5}+5}+\left( \sqrt{2}-\sqrt{2}\sqrt{3}\right) \sqrt{5}+\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$`
60°	$\frac{\pi}{3}$	`$\frac{\sqrt{3}}{2}$`
63°	$\frac{7\pi}{20}$	`$\frac{2\sqrt{\sqrt{5}+5}+\sqrt{2}\sqrt{5}-\sqrt{2}}{8}$`
66°	$\frac{11\pi}{30}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{3}\sqrt{5}-\sqrt{2}\sqrt{3}\right) +2\sqrt{5}+2}{16}$`
69°	$\frac{23\pi}{60}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{3}-1\right) \sqrt{5}-\sqrt{3}+1\right) +\left( \sqrt{2}\sqrt{3}+\sqrt{2}\right) \sqrt{5}+\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$`
72°	$\frac{2\pi}{5}$	`$\frac{\sqrt{2}\sqrt{5}+10}}{4}$`
75°	$\frac{5\pi}{12}$	`$\frac{\sqrt{2}\sqrt{3}+\sqrt{2}}{4}$`
78°	$\frac{13\pi}{30}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{3}\sqrt{5}-\sqrt{2}\sqrt{3}\right) +2\sqrt{5}+2}{16}$`
81°	$\frac{9\pi}{20}$	`$\frac{\left( \sqrt{5}-1\right) \sqrt{\sqrt{5}+5}+\sqrt{2}\sqrt{5}+\sqrt{2}}{8}$`
84°	$\frac{7\pi}{15}$	`$\frac{\left( \sqrt{2}\sqrt{5}+\sqrt{2}\right) \sqrt{6}+\left( \sqrt{5}-1\right) \sqrt{2\sqrt{5}+10}}{16}$`
87°	$\frac{29\pi}{60}$	`$\frac{\left( 2\sqrt{3}+2\right) \sqrt{\sqrt{5}+5}+\left( \sqrt{2}\sqrt{3}-\sqrt{2}\right) \sqrt{5}-\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$`
90°	$\frac{\pi}{2}$	1

4   $\sin\theta$(T_EX)

$\theta(°)$	θ (rad)	$\cos\theta$(TEX)
0°	0	1
3°	$\frac{\pi}{60}$	$\frac{\left(2\sqrt{3}+2\right) \sqrt{\sqrt{5}+5}+\left(\sqrt{2}\sqrt{3}-\sqrt{2}\right) \sqrt{5}-\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$
6°	$\frac{\pi}{30}$	$\frac{\left(\sqrt{2}\sqrt{5}+\sqrt{2}\right) \sqrt{6}+\left(\sqrt{5}-1\right) \sqrt{2\sqrt{5}+10}}{16}$
9°	$\frac{\pi}{20}$	$\frac{\left(\sqrt{5}-1\right) \sqrt{\sqrt{5}+5}+\sqrt{2}\sqrt{5}+\sqrt{2}}{8}$
12°	$\frac{\pi}{15}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{3}\sqrt{5}-\sqrt{2}\sqrt{3}\right) +2\sqrt{5}+2}{16}$
15°	$\frac{\pi}{12}$	$\frac{\sqrt{2}\sqrt{3}+\sqrt{2}}{4}$
18°	$\frac{\pi}{10}$	$\frac{\sqrt{2\sqrt{5}+10}}{4}$
21°	$\frac{7\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{3}-1\right) \sqrt{5}-\sqrt{3}+1\right) +\left(\sqrt{2}\sqrt{3}+\sqrt{2}\right) \sqrt{5}+\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$
24°	$\frac{2\pi}{15}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{3}\sqrt{5}-\sqrt{2}\sqrt{3}\right) +2\sqrt{5}+2}{16}$
27°	$\frac{3\pi}{20}$	$\frac{2\sqrt{\sqrt{5}+5}+\sqrt{2}\sqrt{5}-\sqrt{2}}{8}$
30°	$\frac{\pi}{6}$	$\frac{\sqrt{3}}{2}$
33°	$\frac{11\pi}{60}$	$\frac{\left(2\sqrt{3}+2\right) \sqrt{\sqrt{5}+5}+\left(\sqrt{2}-\sqrt{2}\sqrt{3}\right) \sqrt{5}+\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$
36°	$\frac{\pi}{5}$	$\frac{\sqrt{5}+1}{4}$
39°	$\frac{13\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{3}+1\right) \sqrt{5}-\sqrt{3}-1\right) +\left(\sqrt{2}\sqrt{3}-\sqrt{2}\right) \sqrt{5}+\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$
42°	$\frac{7\pi}{30}$	$\frac{\sqrt{2}\sqrt{\sqrt{5}+5}+\sqrt{3}\sqrt{5}-\sqrt{3}}{8}$
45°	$\frac{\pi}{4}$	$\frac{\sqrt{2}}{2}$
48°	$\frac{4\pi}{15}$	$\frac{\sqrt{2}\sqrt{3}\sqrt{\sqrt{5}+5}-\sqrt{5}+1}{8}$
51°	$\frac{17\pi}{60}$	$-\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{3}-1\right) \sqrt{5}-\sqrt{3}+1\right) +\left(-\sqrt{2}\sqrt{3}-\sqrt{2}\right) \sqrt{5}-\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$
54°	$\frac{3\pi}{10}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}-\sqrt{2}\right) }{8}$
57°	$\frac{19\pi}{60}$	$\frac{\left(2\sqrt{3}-2\right) \sqrt{\sqrt{5}+5}+\left(\sqrt{2}\sqrt{3}+\sqrt{2}\right) \sqrt{5}-\sqrt{2}\sqrt{3}-\sqrt{2}}{16}$
60°	$\frac{\pi}{3}$	$\frac{1}{2}$
63°	$\frac{7\pi}{20}$	$\frac{2\sqrt{\sqrt{5}+5}-\sqrt{2}\sqrt{5}+\sqrt{2}}{8}$
66°	$\frac{11\pi}{30}$	$\frac{\sqrt{\sqrt{5}+5}\left(\sqrt{2}\sqrt{5}-2\sqrt{2}\right) +\sqrt{3}\sqrt{5}-\sqrt{3}}{8}$
69°	$\frac{23\pi}{60}$	$\frac{\sqrt{\sqrt{5}+5}\left(\left(\sqrt{3}+1\right) \sqrt{5}-\sqrt{3}-1\right) +\left(\sqrt{2}-\sqrt{2}\sqrt{3}\right) \sqrt{5}-\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$
72°	$\frac{2\pi}{5}$	$\frac{\sqrt{5}-1}{4}$
75°	$\frac{5\pi}{12}$	$\frac{\sqrt{2}\sqrt{3}-\sqrt{2}}{4}$
78°	$\frac{13\pi}{30}$	$\frac{\sqrt{2}\sqrt{\sqrt{5}+5}-\sqrt{3}\sqrt{5}+\sqrt{3}}{8}$
81°	$\frac{9\pi}{20}$	$-\frac{\left(\sqrt{5}-1\right) \sqrt{\sqrt{5}+5}-\sqrt{2}\sqrt{5}-\sqrt{2}}{8}$
84°	$\frac{7\pi}{15}$	$\frac{\sqrt{3}\left(\sqrt{5}-1\right) \sqrt{2\sqrt{5}+10}-2\sqrt{5}-2}{16}$
87°	$\frac{29\pi}{60}$	$-\frac{\left(2\sqrt{3}-2\right) \sqrt{\sqrt{5}+5}+\left(-\sqrt{2}\sqrt{3}-\sqrt{2}\right) \sqrt{5}+\sqrt{2}\sqrt{3}+\sqrt{2}}{16}$
90°	$\frac{\pi}{2}$	0

5   $\cos\theta$(TEX)

$\theta(°)$	θ (rad)	$\tan\theta$(TEX)
0°	0	0
3°	$\frac{\pi}{60}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{2}\sqrt{3}-\sqrt{2}\right) \sqrt{5}+\sqrt{2}\sqrt{3}-3\sqrt{2}\right) +\left( 4-2\sqrt{3}\right) \sqrt{5}-6\sqrt{3}+8}{4}$`
6°	$\frac{\pi}{30}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}-\sqrt{2}\right) -2\sqrt{3}\sqrt{5}+2\sqrt{3}}{4}$`
9°	$\frac{\pi}{20}$	`$-\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}+\sqrt{2}\right) -4\sqrt{5}-4}{4}$`
12°	$\frac{\pi}{15}$	`$-\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}-2\sqrt{2}\right) +\sqrt{3}\sqrt{5}-3\sqrt{3}}{2}$`
15°	$\frac{\pi}{12}$	`$2-\sqrt{3}$`
18°	$\frac{\pi}{10}$	`$\frac{\sqrt{\sqrt{5}+5}\left( 3\sqrt{2}\sqrt{5}-5\sqrt{2}\right) }{20}$`
21°	$\frac{7\pi}{60}$	`$-\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{2}\sqrt{3}+2\sqrt{2}\right) \sqrt{5}-3\sqrt{2}\sqrt{3}-4\sqrt{2}\right) +\left( -2\sqrt{3}-4\right) \sqrt{5}+6\sqrt{3}+8}{4}$`
24°	$\frac{2\pi}{15}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}+3\sqrt{2}\right) -2\sqrt{3}\sqrt{5}-6\sqrt{3}}{4}$`
27°	$\frac{3\pi}{20}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}-3\sqrt{2}\right) +4\sqrt{5}-4}{4}$`
30°	$\frac{\pi}{6}$	`$\frac{\sqrt{3}}{3}$`
33°	$\frac{11\pi}{60}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{2}\sqrt{3}-\sqrt{2}\right) \sqrt{5}+\sqrt{2}\sqrt{3}-3\sqrt{2}\right) +\left( 2\sqrt{3}-4\right) \sqrt{5}+6\sqrt{3}-8}{4}$`
36°	$\frac{\pi}{5}$	`$-\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}-3\sqrt{2}\right) }{4}$`
39°	$\frac{13\pi}{60}$	`$-\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{2}\sqrt{3}-2\sqrt{2}\right) \sqrt{5}-3\sqrt{2}\sqrt{3}+4\sqrt{2}\right) +\left( 4-2\sqrt{3}\right) \sqrt{5}+6\sqrt{3}-8}{4}$`
42°	$\frac{7\pi}{30}$	`$-\frac{\sqrt{2}\sqrt{\sqrt{5}+5}-\sqrt{3}\sqrt{5}-\sqrt{3}}{2}$`
45°	$\frac{\pi}{4}$	1
48°	$\frac{4\pi}{15}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}-2\sqrt{2}\right) -\sqrt{3}\sqrt{5}+3\sqrt{3}}{2}$`
51°	$\frac{17\pi}{60}$	`$-\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{2}\sqrt{3}+2\sqrt{2}\right) \sqrt{5}-3\sqrt{2}\sqrt{3}-4\sqrt{2}\right) +\left( 2\sqrt{3}+4\right) \sqrt{5}-6\sqrt{3}-8}{4}$`
54°	$\frac{3\pi}{10}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}+5\sqrt{2}\right) }{20}$`
57°	$\frac{19\pi}{60}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{2}\sqrt{3}+\sqrt{2}\right) \sqrt{5}+\sqrt{2}\sqrt{3}+3\sqrt{2}\right) +\left( -2\sqrt{3}-4\right) \sqrt{5}-6\sqrt{3}-8}{4}$`
60°	$\frac{\pi}{3}$	`$\sqrt{3}$`
63°	$\frac{7\pi}{20}$	`$-\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}-3\sqrt{2}\right) -4\sqrt{5}+4}{4}$`
66°	$\frac{11\pi}{30}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}-\sqrt{2}\right) +2\sqrt{3}\sqrt{5}-2\sqrt{3}}{4}$`
69°	$\frac{23\pi}{60}$	`$-\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{2}\sqrt{3}-2\sqrt{2}\right) \sqrt{5}-3\sqrt{2}\sqrt{3}+4\sqrt{2}\right) +\left( 2\sqrt{3}-4\right) \sqrt{5}-6\sqrt{3}+8}{4}$`
72°	$\frac{2\pi}{5}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}+\sqrt{2}\right) }{4}$`
75°	$\frac{5\pi}{12}$	`$\sqrt{3}+2$`
78°	$\frac{13\pi}{30}$	`$\frac{\sqrt{2}\sqrt{\sqrt{5}+5}+\sqrt{3}\sqrt{5}+\sqrt{3}}{2}$`
81°	$\frac{9\pi}{20}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}+\sqrt{2}\right) +4\sqrt{5}+4}{4}$`
84°	$\frac{7\pi}{15}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \sqrt{2}\sqrt{5}+3\sqrt{2}\right) +2\sqrt{3}\sqrt{5}+6\sqrt{3}}{4}$`
87°	$\frac{29\pi}{60}$	`$\frac{\sqrt{\sqrt{5}+5}\left( \left( \sqrt{2}\sqrt{3}+\sqrt{2}\right) \sqrt{5}+\sqrt{2}\sqrt{3}+3\sqrt{2}\right) +\left( 2\sqrt{3}+4\right) \sqrt{5}+6\sqrt{3}+8}{4}$`
90°	$\frac{\pi}{2}$	

6 $\tan\theta$(TEX)