

φ	0	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	$\frac{2\pi}{3}$	$\frac{3\pi}{4}$	$\frac{5\pi}{6}$	π	$\frac{7\pi}{6}$	$\frac{5\pi}{4}$	$\frac{4\pi}{3}$	$\frac{3\pi}{2}$	$\frac{5\pi}{3}$	$\frac{7\pi}{4}$	$\frac{11\pi}{6}$	2π
$\cos \varphi$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0	$-\frac{1}{2}$	$-\frac{\sqrt{2}}{2}$	$-\frac{\sqrt{3}}{2}$	-1	$-\frac{\sqrt{3}}{2}$	$-\frac{\sqrt{2}}{2}$	$-\frac{1}{2}$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
$\sin \varphi$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0	$-\frac{1}{2}$	$-\frac{\sqrt{2}}{2}$	$-\frac{\sqrt{3}}{2}$	-1	$-\frac{\sqrt{3}}{2}$	$-\frac{\sqrt{2}}{2}$	$-\frac{1}{2}$	0
$\operatorname{tg} \varphi$	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$		$-\sqrt{3}$	-1	$-\frac{\sqrt{3}}{3}$	0	$-\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$		$-\sqrt{3}$	-1	$-\frac{\sqrt{3}}{3}$	0
$\operatorname{ctg} \varphi$		$\sqrt{3}$	1	$\frac{\sqrt{3}}{3}$	0	$-\frac{\sqrt{3}}{3}$	-1	$-\sqrt{3}$		$-\sqrt{3}$	1	$\frac{\sqrt{3}}{3}$	0	$-\frac{\sqrt{3}}{3}$	-1	$-\sqrt{3}$	

1. $\forall x \in R, (\sin^2 x + \cos^2 x = 1);$
2. $\forall k \in Z, \forall x \neq \frac{\pi}{2} + k\pi, (\operatorname{tg} x = \frac{\sin x}{\cos x});$
3. $\forall k \in Z, \forall x \neq k\pi, (\operatorname{ctg} x = \frac{\cos x}{\sin x});$
4. $\forall k \in Z, \forall x \neq \frac{\pi}{2} + k\pi, (1 + \operatorname{tg}^2 x = \frac{1}{\cos^2 x});$
5. $\forall x \in R, (\cos x = \sin(x + \frac{\pi}{2}));$
6. $\forall x \in R, (\sin(x + \pi) = -\sin x);$
7. $\forall x \in R, (\cos(x + \frac{\pi}{2}) = -\sin x);$
8. $\forall x \in R, (\cos(x + \pi) = -\cos x);$
9. $\forall x \in R, (\sin 2x = 2 \sin x \cos x);$
10. $\forall x \in R, (\cos 2x = \cos^2 x - \sin^2 x);$
11. $\forall x \in R, (\cos 2x = 1 - 2 \sin^2 x);$
12. $\forall x \in R, (\cos 2x = 2 \cos^2 x - 1);$
13. $\forall x \in R, \left(|\sin \frac{x}{2}| = \sqrt{\frac{1}{2}(1 - \cos x)} \right);$
14. $\forall x \in R, \left(|\cos \frac{x}{2}| = \sqrt{\frac{1}{2}(1 + \cos x)} \right);$
15. $\forall x, y \in R, (\sin(x + y) = \sin x \cos y + \cos x \sin y);$
16. $\forall x, y \in R, (\cos(x + y) = \cos x \cos y - \sin x \sin y);$
17. $\forall x, y \in R, (\sin(x - y) = \sin x \cos y - \cos x \sin y);$
18. $\forall x, y \in R, (\cos(x - y) = \cos x \cos y + \sin x \sin y);$
19. $\forall x, y \in R, (\sin x + \sin y = 2 \sin \frac{x+y}{2} \cos \frac{x-y}{2});$
20. $\forall x, y \in R, (\sin x - \sin y = 2 \cos \frac{x+y}{2} \sin \frac{x-y}{2});$
21. $\forall x, y \in R, (\cos x + \cos y = 2 \cos \frac{x+y}{2} \cos \frac{x-y}{2});$
22. $\forall x, y \in R, (\cos x - \cos y = -2 \sin \frac{x+y}{2} \sin \frac{x-y}{2}).$