

公式

1. 三角比の値

	0°	30°	45°	60°	90°	120°	135°	150°	180°
$\sin \theta$	0	$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0
$\cos \theta$	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0	$-\frac{1}{2}$	$-\frac{1}{\sqrt{2}}$	$-\frac{\sqrt{3}}{2}$	-1
$\tan \theta$	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	なし	$-\sqrt{3}$	-1	$-\frac{1}{\sqrt{3}}$	0

2. 三角比の相互関係

$$\sin^2 \theta + \boxed{\cos^2 \theta} = 1$$

$$1 + \tan^2 \theta = \boxed{\frac{1}{\cos^2 \theta}}$$

$$\tan \theta = \boxed{\frac{\sin \theta}{\cos \theta}}$$

3. $(90^\circ - \theta)$ の三角比

$$\sin(90^\circ - \theta) = \boxed{\cos \theta}$$

$$\cos(90^\circ - \theta) = \boxed{\sin \theta}$$

$$\tan(90^\circ - \theta) = \boxed{\frac{1}{\tan \theta}}$$

4. $(180^\circ - \theta)$ の三角比

$$\sin(180^\circ - \theta) = \boxed{\sin \theta}$$

$$\cos(180^\circ - \theta) = \boxed{-\cos \theta}$$

$$\tan(180^\circ - \theta) = \boxed{-\tan \theta}$$