

Trigonometric Table - Tips & Tricks

Trigonometric Table

1) write

0 1 2 3 4

2) divide by 4

$\frac{0}{4}$ $\frac{1}{4}$ $\frac{2}{4}$ $\frac{3}{4}$ $\frac{4}{4}$

3) apply $\sqrt{\quad}$

$\sqrt{0}$ $\sqrt{\frac{1}{4}}$ $\sqrt{\frac{2}{4}}$ $\sqrt{\frac{3}{4}}$ $\sqrt{1}$

4) Result of $\sqrt{\quad}$

0 $\frac{1}{2}$ $\frac{1}{\sqrt{2}}$ $\frac{\sqrt{3}}{2}$ 1

Now, in table

θ	0°	30°	45°	60°	90°
$\sin \theta$	0	$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$	1
$\cos \theta$	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0
$\tan \theta$	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	∞ (Not defined)

write in reverse order for $\cos \theta$

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

$$\frac{0}{1} = 0$$

$$\frac{1}{2} \times \frac{2}{\sqrt{3}} = \frac{1}{\sqrt{3}}$$

$$\frac{1}{\sqrt{2}} \times \frac{\sqrt{2}}{1} = 1$$

$$\frac{\sqrt{3}}{2} \times \frac{2}{1} = \sqrt{3}$$

$$\frac{1}{0} = \infty \text{ (Not defined)}$$

inverse the θ values
to get cosec θ , sec θ , cot θ values for the given angles.

$$\operatorname{cosec} \theta = \frac{1}{\sin \theta}$$

$$\sec \theta = \frac{1}{\cos \theta}$$

$$\cot \theta = \frac{1}{\tan \theta}$$