

Trigonometric values

Trigonometry for 10<sup>th</sup> standard.

Easy way to memorize the values of different trigonometric ratios.

At first you need to memorize only the 1<sup>st</sup> row from the chart .

i.e.  $\sin 0^\circ = 0$

$\sin 30^\circ = 1/2$  and so on.

Then compare Cos table with the values of sin of  $0^\circ$  to  $90^\circ$ . These are written in the reverse way.

And  $\sin 45^\circ = \cos 45^\circ$ .  $\sin 0^\circ = \cos 90^\circ$ .

After memorizing the 1<sup>st</sup> two rows

You need not memorize the other values.

Instead of you should keep the relations of Trigonometric ratios in your mind.

e.g.  $\operatorname{cosec} A = 1/\sin A$

$\sec A = 1/\cos a$

$\tan A = \sin A / \cos A$  etc.

From these relations you will be able  
to find or calculate the all values.

Now start to visit the table carefully

And memorize only the 1<sup>st</sup> raw for the 1<sup>st</sup>  
day.

Welcome to the table

Angles Ratios	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
cosec $\theta$	Not defined	2	$\sqrt{2}$	$\frac{2}{\sqrt{3}}$	1
sec $\theta$	1	$\frac{2}{\sqrt{3}}$	$\sqrt{2}$	2	Not defined
cot $\theta$	Not defined	$\sqrt{3}$	1	$\frac{1}{\sqrt{3}}$	0

<i>Angles in degrees</i>	$0^{\circ}$	$30^{\circ}$	$45^{\circ}$	$60^{\circ}$	$90^{\circ}$
<b>Sin</b>	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
<b>Cos</b>	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
<b>Tan</b>	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	Not defined
<b>Cosec</b>	Not defined	2	$\sqrt{2}$	$\frac{2\sqrt{3}}{3}$	1
<b>Sec</b>	1	$\frac{2\sqrt{3}}{3}$	$\sqrt{2}$	2	Not defined
<b>Cot</b>	Not defined	$\sqrt{3}$	1	$\frac{\sqrt{3}}{3}$	0