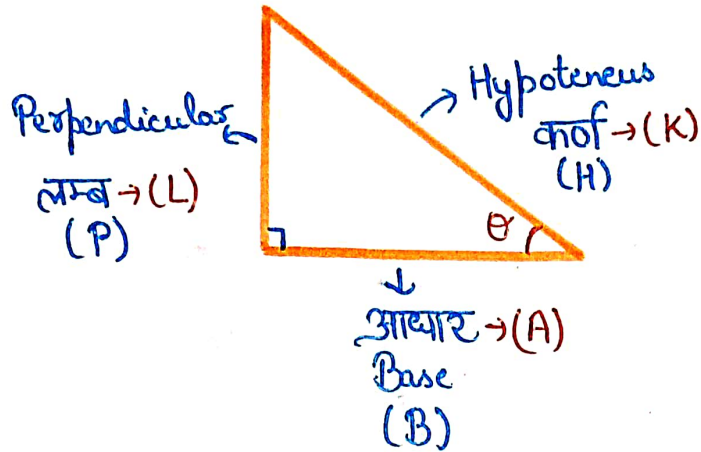


TRIGONOMETRY



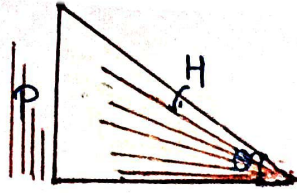
$$\begin{aligned} \sin \theta &= \frac{P}{H} = \frac{L}{K} & \csc \theta &= \frac{1}{\sin \theta} = \frac{H}{P} = \frac{K}{L} \\ \cos \theta &= \frac{B}{H} = \frac{A}{K} & \sec \theta &= \frac{1}{\cos \theta} = \frac{H}{B} = \frac{K}{A} \\ \tan \theta &= \frac{P}{B} = \frac{L}{A} & \cot \theta &= \frac{1}{\tan \theta} = \frac{B}{P} = \frac{A}{L} \end{aligned}$$

Trick

Sona $\downarrow$ Pandit $\downarrow$ Har
 Chandi $\downarrow$ Badri $\downarrow$ Har
 Tole $\downarrow$ Prasad $\downarrow$ Bole
 S $\downarrow$ L $\downarrow$ K
 C $\downarrow$ A $\downarrow$ K
 T $\downarrow$ L $\downarrow$ A

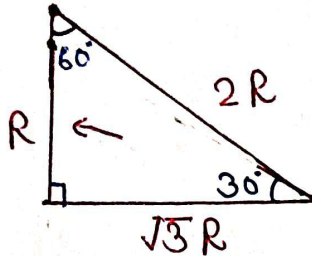
TRIGONOMETRIC TABLE OF ACUTE ANGLE :-

angle	0°	30°	45°	60°	90°
Sin θ	0	$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$	1
cos θ	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0
tan θ	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	N.D
Cosec θ	N.D	2	$\sqrt{2}$	$\frac{2}{\sqrt{3}}$	1
Sec θ	1	$\frac{2}{\sqrt{3}}$	$\sqrt{2}$	2	N.D
Cot θ	N.D	$\sqrt{3}$	1	$\frac{1}{\sqrt{3}}$	0

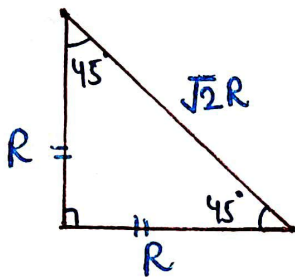


$$\frac{P}{H} = 0 \quad \sin 0^\circ = 0$$

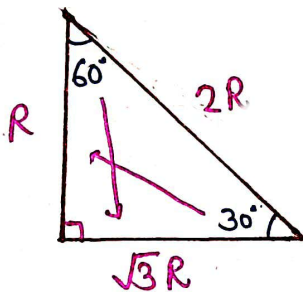
$$P=0 \quad \theta=0$$



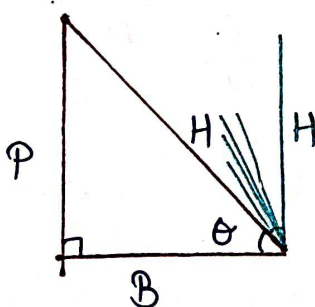
$$\sin 30^\circ = \frac{R}{2R} = \frac{1}{2}$$



$$\sin 45^\circ = \frac{R}{\sqrt{2}R} = \frac{1}{\sqrt{2}}$$



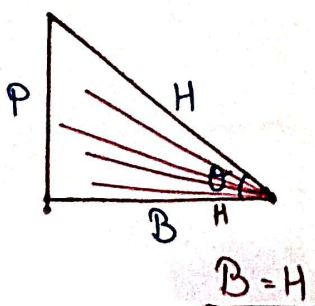
$$\sin 60^\circ = \frac{\sqrt{3}R}{2R} = \frac{\sqrt{3}}{2}$$



$$P=H$$

$$\sin \theta = \frac{P}{H}$$

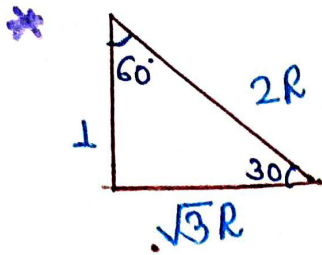
$$\sin 90^\circ = \frac{P}{P} \quad (1)$$



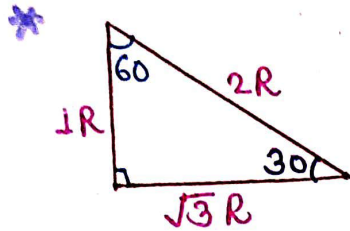
$$\cos \theta = \frac{B}{H}$$

$$\cos 0^\circ = 1$$

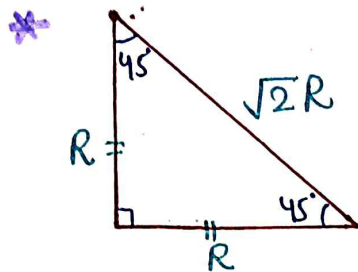
$$B=H$$



$$\cos 30^\circ = \frac{\sqrt{3}R}{2R} = \frac{\sqrt{3}}{2}$$



$$\cos 60^\circ = \frac{1R}{2R} = \frac{1}{2}$$



$$\cos 45^\circ = \frac{R}{\sqrt{2}R} = \frac{1}{\sqrt{2}}$$

* $\left\{ \tan 90^\circ = \frac{1}{0} \right\} \Rightarrow \text{Not defined.}$

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