

TRIGONOMETRY TABLE

Complete Values (0° to 360°) – Quick Revision Sheet

For Class 10, 11 & JEE Students

1. Basic Trigonometric Ratios (Right-Angled Triangle)

For any angle θ :

- $\sin \theta = \text{Perpendicular} / \text{Hypotenuse}$
- $\cos \theta = \text{Base} / \text{Hypotenuse}$
- $\tan \theta = \text{Perpendicular} / \text{Base}$
- $\text{cosec } \theta = 1 / \sin \theta$
- $\sec \theta = 1 / \cos \theta$
- $\cot \theta = 1 / \tan \theta$

Remember:

SOH – CAH – TOA

2. Standard Trigonometry Table (0° – 90°)

Angle (θ)	0°	30°	45°	60°	90°
$\sin \theta$	0	$1/2$	$1/\sqrt{2}$	$\sqrt{3}/2$	1
$\cos \theta$	1	$\sqrt{3}/2$	$1/\sqrt{2}$	$1/2$	0
$\tan \theta$	0	$1/\sqrt{3}$	1	$\sqrt{3}$	Not Defined
$\text{cosec } \theta$	Not Defined	2	$\sqrt{2}$	$2/\sqrt{3}$	1

sec θ	1	$\frac{2}{\sqrt{3}}$	$\sqrt{2}$	2	Not Defined
cot θ	Not Defined	$\sqrt{3}$	1	$\frac{1}{\sqrt{3}}$	0

3. Easy Pattern to Remember

For sine values:

Write 0, 1, 2, 3, 4

Take $\sqrt{(\text{number})/2}$

For cosine values:

Same numbers but reverse order

For tangent:

$$\tan \theta = \sin \theta / \cos \theta$$

4. Important Undefined Values

- $\tan 90^\circ \rightarrow$ Not Defined
- $\sec 90^\circ \rightarrow$ Not Defined
- $\operatorname{cosec} 0^\circ \rightarrow$ Not Defined
- $\cot 0^\circ \rightarrow$ Not Defined

Reason: Division by zero is not possible.

5. Quadrant Sign Rule (0° – 360°)

Quadrant	Angle Range	Positive Ratios
1st	0° – 90°	All
2nd	90° – 180°	sin, cosec
3rd	180° – 270°	tan, cot
4th	270° – 360°	cos, sec

6. Reference Angle Concept

To find value of angles beyond 90° :

- Express the angle using 180° or 360°
- Use the related acute angle (between 0° – 90°)
- Apply correct sign using quadrant rule

Example:

$$\sin 150^\circ = \sin (180^\circ - 30^\circ)$$

Reference angle = 30°

Since it lies in 2nd quadrant $\rightarrow$ Positive

7. Common Exam Reminders

- ✓ Always check calculator mode (Degree Mode)
- ✓ Do not forget signs in different quadrants
- ✓ Memorise standard 0° – 90° values properly
- ✓ Write “Not Defined” clearly in board exams

8. Where This Table Is Used

- Heights and Distances
- Trigonometric Identities
- Equations
- Graphs (Class 11)
- JEE & other entrance exams

Final Tip for Students

Revise this table daily for 5 minutes instead of memorising at the last moment.
Concept clarity + regular practice = strong confidence in exams.