

ACADEMIC UNIT CIRCLE

Standard Reference Chart: $(\cos \hat{I}, \sin \hat{I})$

0 $(1, 0)$ 45 $(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2})$ 90 $(0, 1)$ 180 $(-1, 0)$ 270 $(0, -1)$

Identities

$$\sin^2 \hat{I} + \cos^2 \hat{I} = 1$$

$$\tan \hat{I} = \sin \hat{I} / \cos \hat{I}$$

Reciprocals

$$\csc \hat{I} = 1 / \sin \hat{I}$$

$$\sec \hat{I} = 1 / \cos \hat{I}$$

$$\cot \hat{I} = 1 / \tan \hat{I}$$

Signs

QI: All (+)

QII: Sin (+)

QIII: Tan (+)

QIV: Cos (+)