

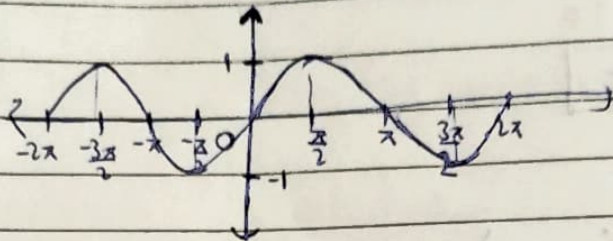
$$*) \cos \theta = \sin \left(\frac{\pi}{2} - \theta \right)$$

$$\text{or } \sin \theta = \cos \left(\frac{\pi}{2} - \theta \right)$$

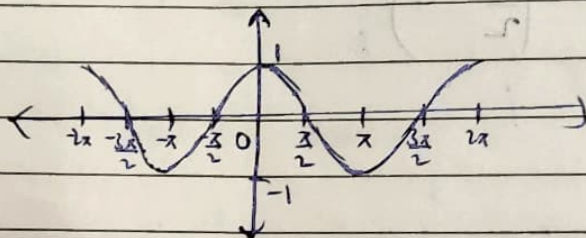
by

Quadrant	$\sin(x)$	$\cos(x)$
I $0 \leq x < \frac{\pi}{2}$	$[0, 1)$	$(0, 1]$
II $\frac{\pi}{2} \leq x < \pi$	$(0, 1]$	$[-1, 0)$
III $\pi \leq x < \frac{3\pi}{2}$	$[-1, 0)$	$[-1, 0)$
IV $\frac{3\pi}{2} \leq x < 2\pi$	$[-1, 0)$	$[0, 1)$

Graph of $\sin x$ -



Graph of $\cos x$ -



Formulas -

$$\cos(x+y) = \cos x \cos y - \sin x \sin y$$

$$\cos(x-y) = \cos x \cos y + \sin x \sin y$$