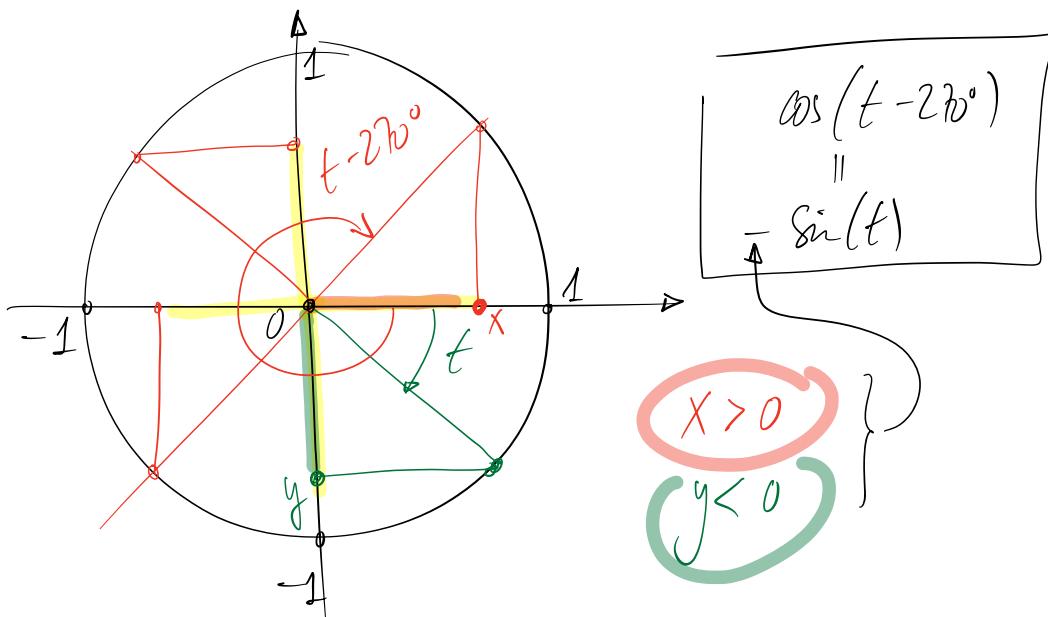
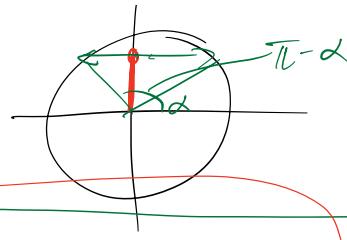


$\sin \alpha = 0,4$ $\sin^{-1} 0,4 \approx 23^\circ$
 $\alpha = \arcsin(0,4) + k \cdot 2\pi$ # turns
 $\alpha = \pi - \arcsin(0,4) + k \cdot 2\pi$

$$\frac{\sin^2 x}{1 - \cos x} = x$$



$$\sin\left(\frac{2t}{3} + \frac{\pi}{4}\right) = \frac{\sqrt{2}}{2}$$



$\Leftrightarrow ① \boxed{\frac{2t}{3} + \frac{\pi}{4}} = \arcsin\left(\frac{\sqrt{2}}{2}\right) + k \cdot 2\pi = \boxed{\frac{\pi}{4} + k \cdot 2\pi}$

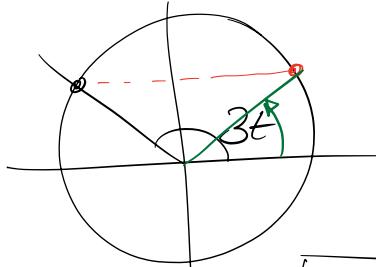
$\frac{2t}{3} = k \cdot 2\pi \quad t = k \cdot \frac{6\pi}{2} = \boxed{k \cdot 3\pi} \quad k \in \mathbb{Z}$

$② \quad \frac{2t}{3} + \frac{\pi}{4} = \pi - \arcsin\left(\frac{\sqrt{2}}{2}\right) + k \cdot 2\pi$

$\frac{2t}{3} + \frac{\pi}{4} = \pi - \frac{\pi}{4} + k \cdot 2\pi \Leftrightarrow \frac{2t}{3} = \pi - \frac{\pi}{4} - \frac{\pi}{4} + k \cdot 2\pi \quad k \in \mathbb{Z}$

$\frac{2t}{3} = \frac{\pi}{2} + k \cdot 2\pi \quad \Leftrightarrow \quad t = \frac{3\pi}{4} + k \cdot 3\pi$

$$\sin 3t = \sin 2t$$



$$3t = \arcsin(\sin 2t) + k \cdot 2\pi$$

$$\boxed{3t = 2t + k \cdot 2\pi} \Leftrightarrow 3t - 2t = k \cdot 2\pi \Leftrightarrow \boxed{t = 0 + k \cdot 2\pi}$$

$$3t = \pi - 2t + k \cdot 2\pi$$

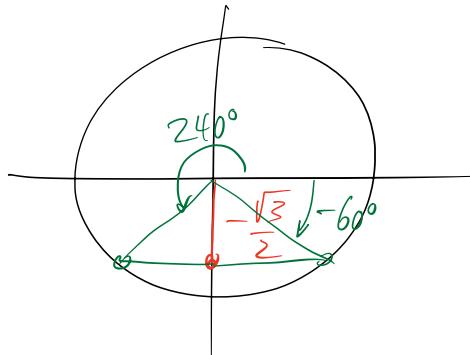
$$5t = \pi + k \cdot 2\pi$$

$$t = \frac{\pi}{5} + k \cdot \frac{2\pi}{5}$$

$$\sin(3t) = -\frac{\sqrt{3}}{2}$$

$$\Leftrightarrow 3t = -60^\circ + k \cdot 360^\circ$$

$$3t = 240^\circ + k \cdot 360^\circ$$



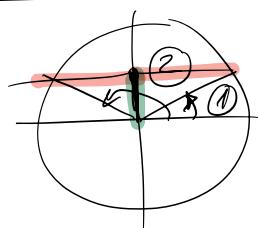
$$\frac{\sin 3t}{\cos 3t} = \frac{\cos t}{\sin t} \Rightarrow \sin 3t \sin t = \cos 3t \cos t$$

$$\sin \alpha \sin \beta = \frac{1}{2} (\cos(\alpha+\beta) + \cos(\alpha-\beta))$$

$$\sin 3t \sin t = \frac{1}{2} (\cos(4t) + \cos(2t))$$

$$\tan 3t = \frac{1}{\tan t}$$

$$\sin\left(\frac{2t}{3} + \frac{\pi}{4}\right) = \frac{\sqrt{2}}{2}$$



$$\textcircled{1} \quad \frac{2t}{3} + \frac{\pi}{4} = \arcsin\left(\frac{\sqrt{2}}{2}\right) + k2\pi$$

$$\textcircled{2} \quad \frac{2t}{3} + \frac{\pi}{4} = \pi - \arcsin\left(\frac{\sqrt{2}}{2}\right) + k2\pi$$