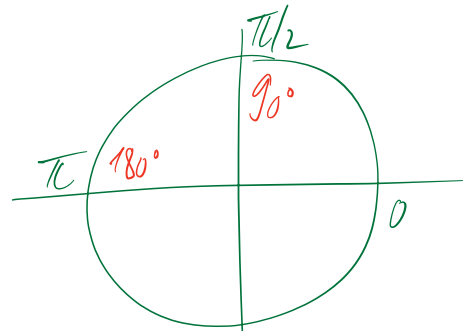
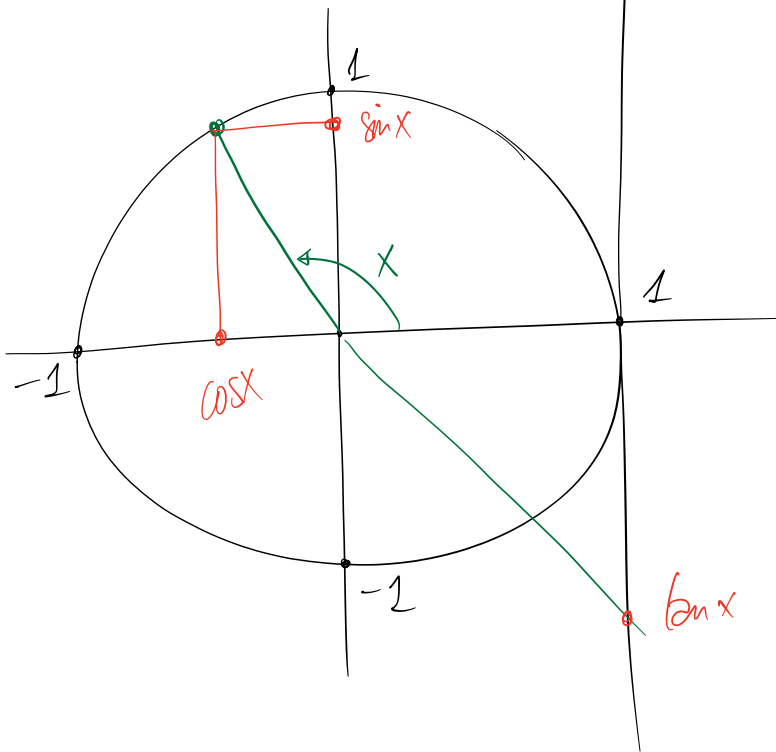


$$\sin: \mathbb{R} \rightarrow [-1; 1]$$

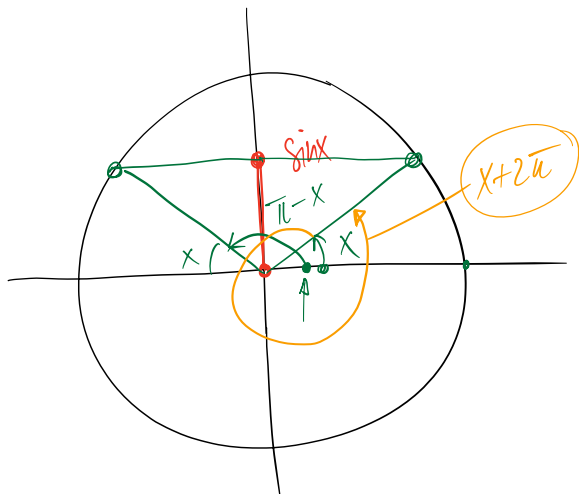
angles
en radians

$$x \mapsto \sin x = \sin(x)$$


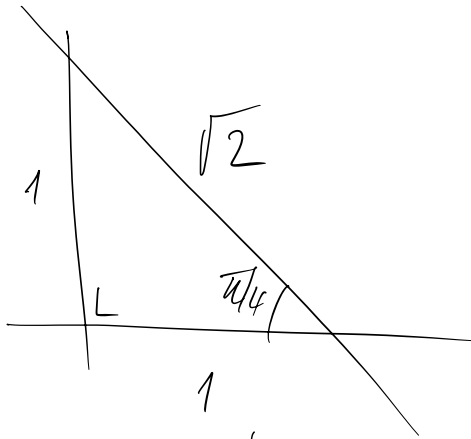
$$\frac{\alpha_{\text{rad}}}{\pi} = \frac{\alpha_{\text{deg}}}{180^\circ}$$



$$\begin{aligned} \sin: \mathbb{R} &\rightarrow [-1; 1] \\ \cos: \mathbb{R} &\rightarrow [-1; 1] \\ \tan: \mathbb{R} - \left\{ \pm \frac{\pi}{2} \right\} &\rightarrow \mathbb{R} \end{aligned}$$



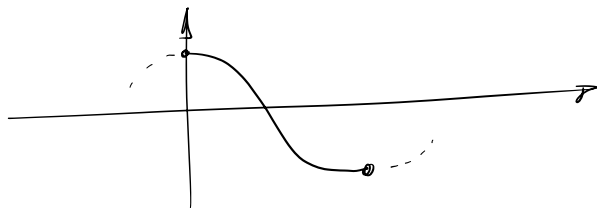
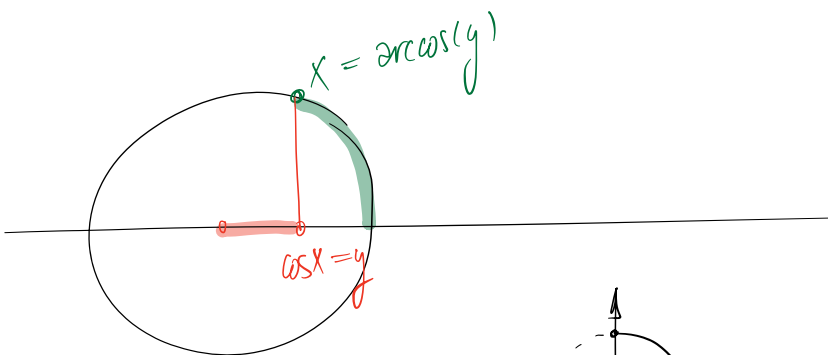
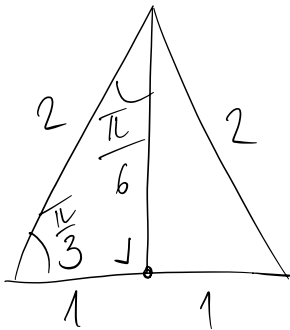
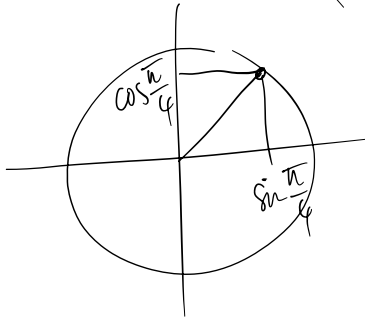
$$\begin{aligned} \sin x &= \sin(\pi - x) \\ \sin x &= \begin{cases} \sin(x - 1 \cdot 2\pi) \\ \sin(x + 0 \cdot 2\pi) \end{cases} \\ \sin x &= \begin{cases} \sin(x + 2\pi) \\ \sin(x + 2 \cdot 2\pi) \\ \sin(x + 3 \cdot 2\pi) \end{cases} \end{aligned}$$

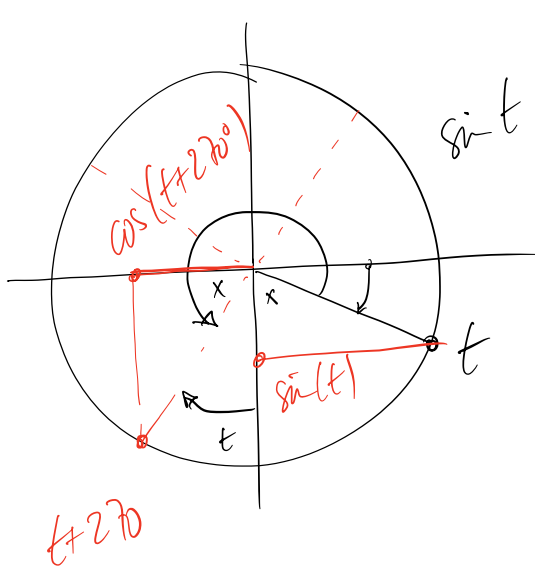


$$\tan \frac{\pi}{4} = \frac{1}{1} = 1$$

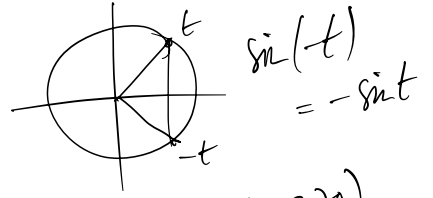
$$\sin \frac{\pi}{4} = \frac{1}{\sqrt{2}} \cdot 1 = \frac{1 \cdot \sqrt{2}}{\sqrt{2} \sqrt{2}} = \frac{\sqrt{2}}{2}$$

$$\cos \frac{\pi}{4} = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$



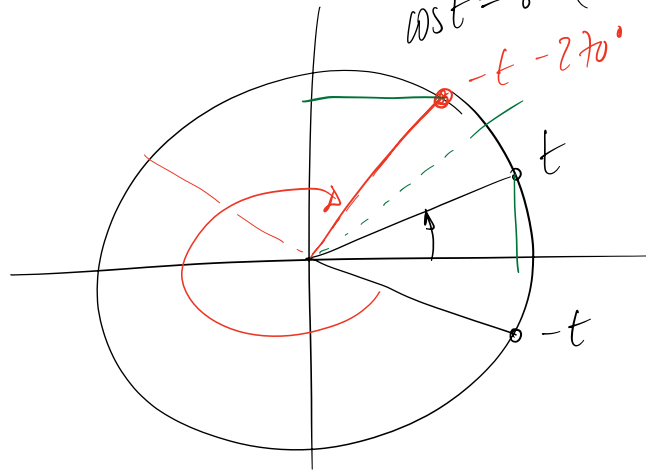


$$\sin t = \cos(t+270^\circ)$$



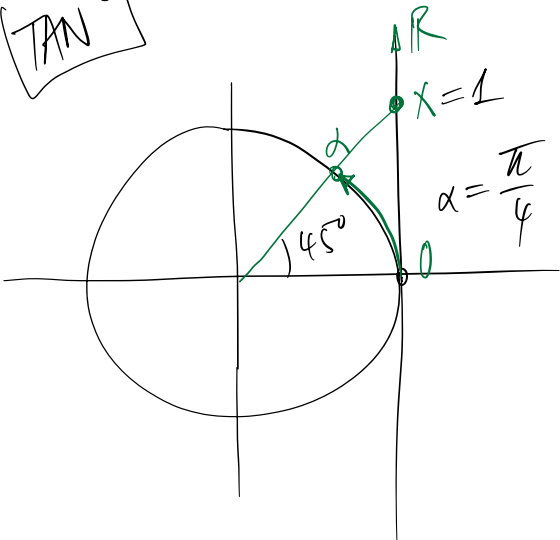
$$\sin(-t) = -\sin t$$

$$\cos t = -\sin(t+270^\circ) = \sin(-t-270^\circ)$$



$$\overset{\alpha}{\arctan}(x) = x - \frac{1}{3}x^3 + \frac{1}{5}x^5 - \frac{1}{7}x^7 + \frac{1}{9}x^9 - \frac{1}{11}x^{11} + \dots$$

TAN⁻¹



$x \in \mathbb{R}$
 α radians