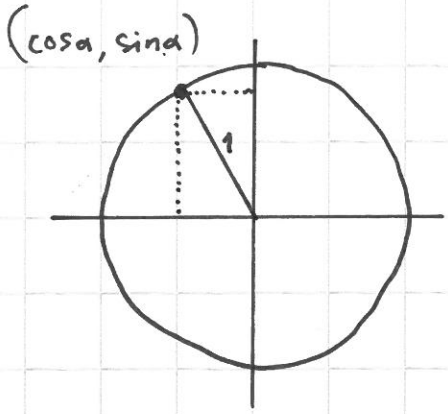
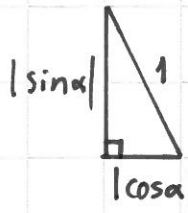
TRIGONOMETRIAN PERUSKAAVA





$$|\sin\alpha|^2 + |\cos\alpha|^2 = 1^2$$

$$\boxed{\sin^2\alpha + \cos^2\alpha = 1} \qquad (\sin\alpha)^2 + (\cos\alpha)^2 = 1$$

ESIM Määritä $\sin\alpha$, kun $\cos\alpha = \frac{3}{5}$ ja $-\frac{\pi}{2} \leq \alpha \leq 0$

$$\sin^2\alpha + \cos^2\alpha = 1 \Rightarrow \sin^2\alpha = 1 - \cos^2\alpha$$

$$\sin^2\alpha = 1 - \frac{9}{25} = \frac{16}{25} \quad \| \sqrt{}$$

$$|\sin\alpha| = \frac{4}{5}$$

$-\frac{\pi}{2} \leq \alpha < 0$ ⇒ $\sin\alpha = -\frac{4}{5}$

IV neljännes

* Kaksinkertaisen kulman muuntaminen

$$\boxed{\sin 2x = 2\sin x \cos x}$$

$$\boxed{\begin{aligned}\cos 2\alpha &= \cos^2\alpha - \sin^2\alpha \\ &= 2\cos^2\alpha - 1 \\ &= 1 - 2\sin^2\alpha\end{aligned}}$$

ESIM 2 + 3

Sarja 1

4.1 – 4.6

Sarja 2

4.11