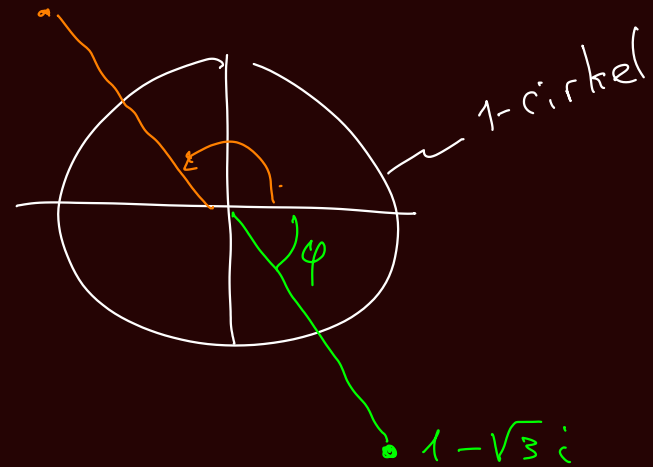


• Argument berekenen: MAP

voorbeeld $\arg(1 - \sqrt{3}i) = \varphi = -\frac{\pi}{3}$

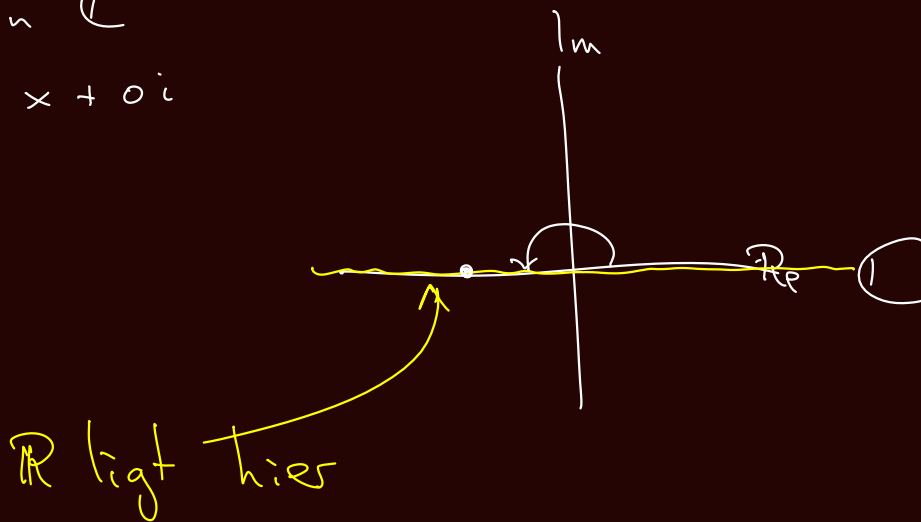
$$\arg(-1 + \sqrt{3}i) = -\frac{\pi}{3} + \pi = \frac{2}{3}\pi$$



• als $x \in \mathbb{R}$ dan ook x in \mathbb{C}
 $x = x + 0i$

Voorbeeld: $x = -\frac{2}{3}$

Vraag: $|x| = \frac{2}{3}$
 $\arg(x) = \pi$



• Ordening.

$$x, y \in \mathbb{R}: \begin{cases} x < y \\ x = y \\ x > y \end{cases}$$

$$\left\| \begin{array}{l} z, w \in \mathbb{C} \\ \left\{ \begin{array}{l} z = w \\ z \neq w \end{array} \right. \end{array} \right.$$

• Definitie: als $x \in \mathbb{R}$ dan def. $e^{ix} = \cos x + i \sin x$ o!

(motivatie: 1) als $x=0$ dan $e^{i \cdot 0} = 1 = \cos 0 + i \sin 0$

2) (we weten $\sin x$ over \mathbb{C} diff)

$$\text{Wilt: } (e^{ix})' = ie^{ix} = -\sin x + i \cos x = ie^{ix}$$