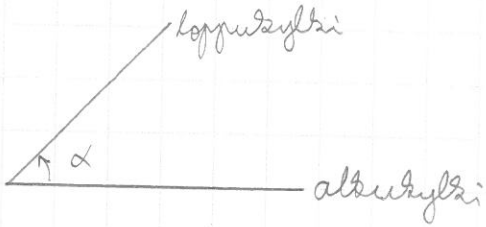


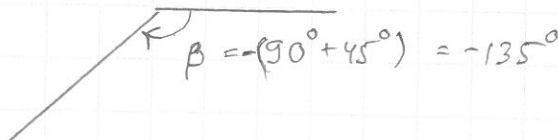
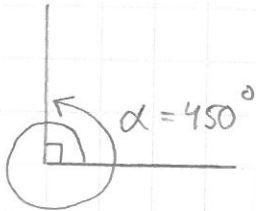
1. Suurimman kulman ja radiaani



merkkisyydet



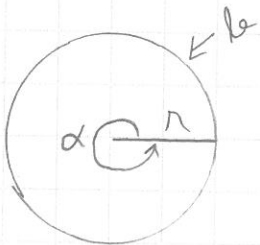
Esim.



$$\alpha = \frac{l}{r}$$

(rad, radiaani)

Huom. Kulman yksikkö radiaani on "pötkön yksikkö": $\text{rad} = \frac{\text{m}}{\text{m}} = 1$.
Yksikkö voidaan merkitä tai jättää pois: $\alpha = 2 \text{ rad} = 2$.



$$\alpha = \frac{l}{r} = \frac{2\pi r}{r} = 2\pi \Rightarrow 2\pi \text{ rad} = 360^\circ \quad | :2$$

$$\Rightarrow \boxed{\pi \text{ rad} = 180^\circ}$$

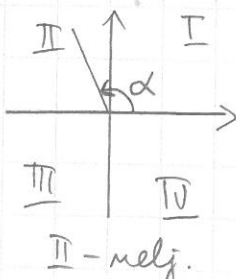
Esim. $30^\circ = 30^\circ \cdot \frac{\pi}{180^\circ} = \frac{\pi}{6}$

$$\frac{2\pi}{3} = \frac{2\pi}{3} \cdot \frac{180^\circ}{\pi} = 120^\circ$$

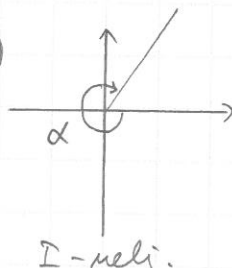
$$\text{TAI: } \frac{2\pi}{3} = \frac{2 \cdot 180^\circ}{3} = 120^\circ$$

$$1 = 1 \cdot \frac{180^\circ}{\pi} \approx 57,3^\circ$$

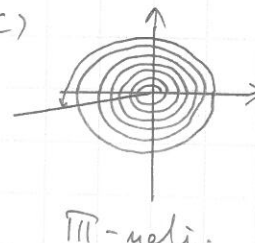
1,2 a)



b)



c)



$$\frac{2345^\circ}{360^\circ} = 6, \dots$$

$$\Rightarrow 2345^\circ = 6 \cdot 360^\circ + 185^\circ$$