

$$\cos \beta = \frac{\text{adj } \beta}{\text{hyp}}$$

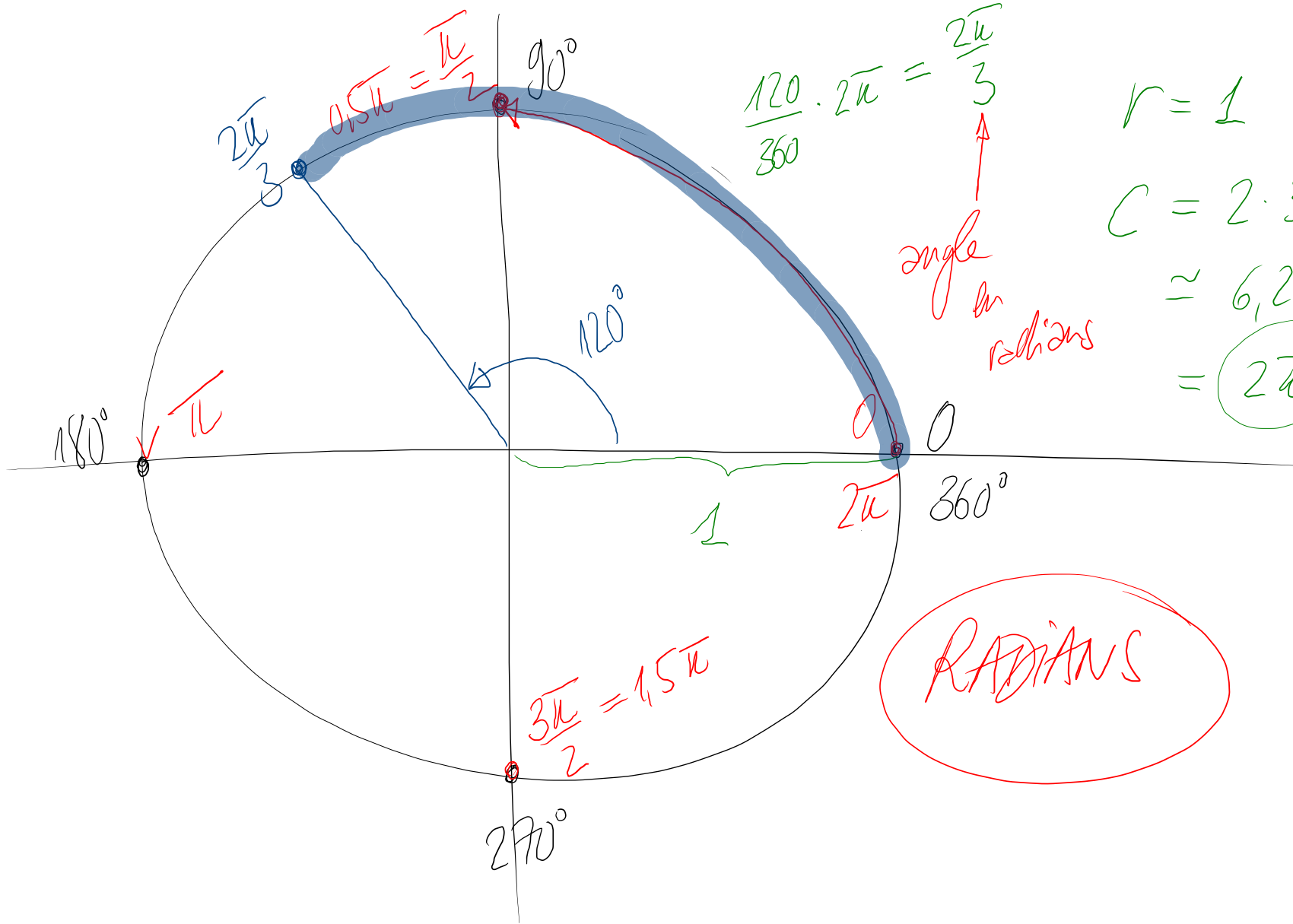
$$\sin \beta = \frac{\text{opp } \beta}{\text{hyp}}$$

$$\tan \beta = \frac{\text{opp } \beta}{\text{adj } \beta}$$

rapports

$$0 \leq \cos \beta, \sin \beta \leq 1$$

ANGLE



$$\frac{120}{360} \cdot 2\pi = \frac{2\pi}{3}$$

$$r = 1$$

$$C = 2 \cdot 3.14159265358979 \dots$$

$$\approx 6.28$$

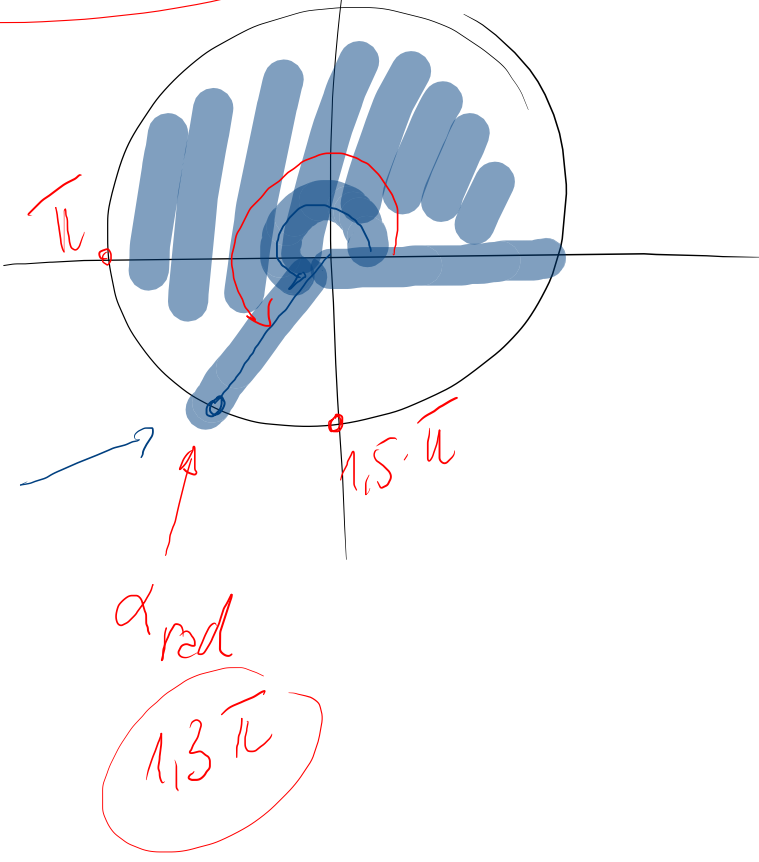
$$= 2\pi$$

angle in radians

RADIAN

4.1.1 / 4.1.2

$$\frac{\alpha_{rad}}{2\pi} = \frac{\alpha_{deg}}{360^\circ}$$



140° ≈ α deg

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

$$\alpha_{rad} = \frac{\alpha_{deg}}{180^\circ} \cdot \pi = \frac{\alpha_{deg}}{360^\circ} \cdot 2\pi$$

$$\alpha_{deg} = \frac{\alpha_{rad}}{\pi} \cdot 180^\circ = \frac{\alpha_{rad}}{2\pi} \cdot 360^\circ$$

$$\frac{\frac{\pi}{6}}{\frac{2\pi}{1}} = \frac{\alpha}{360^\circ}$$

$$\frac{\cancel{\pi}}{6 \cdot 2\cancel{\pi}} = \frac{1}{12} = \frac{\alpha}{360^\circ}$$

$$\Rightarrow \alpha = \frac{360^\circ}{12}$$

$$\frac{\alpha}{180^\circ} = \frac{\pi/6}{\pi}$$

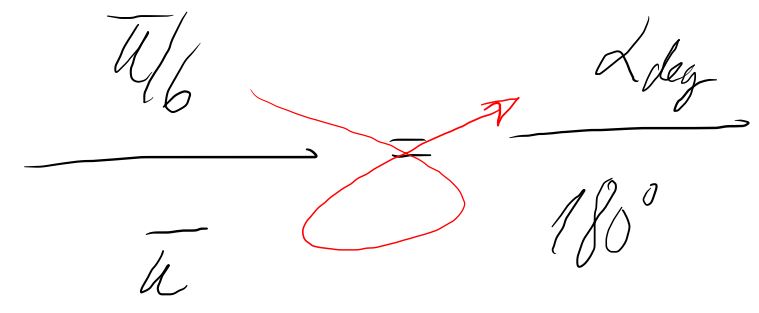
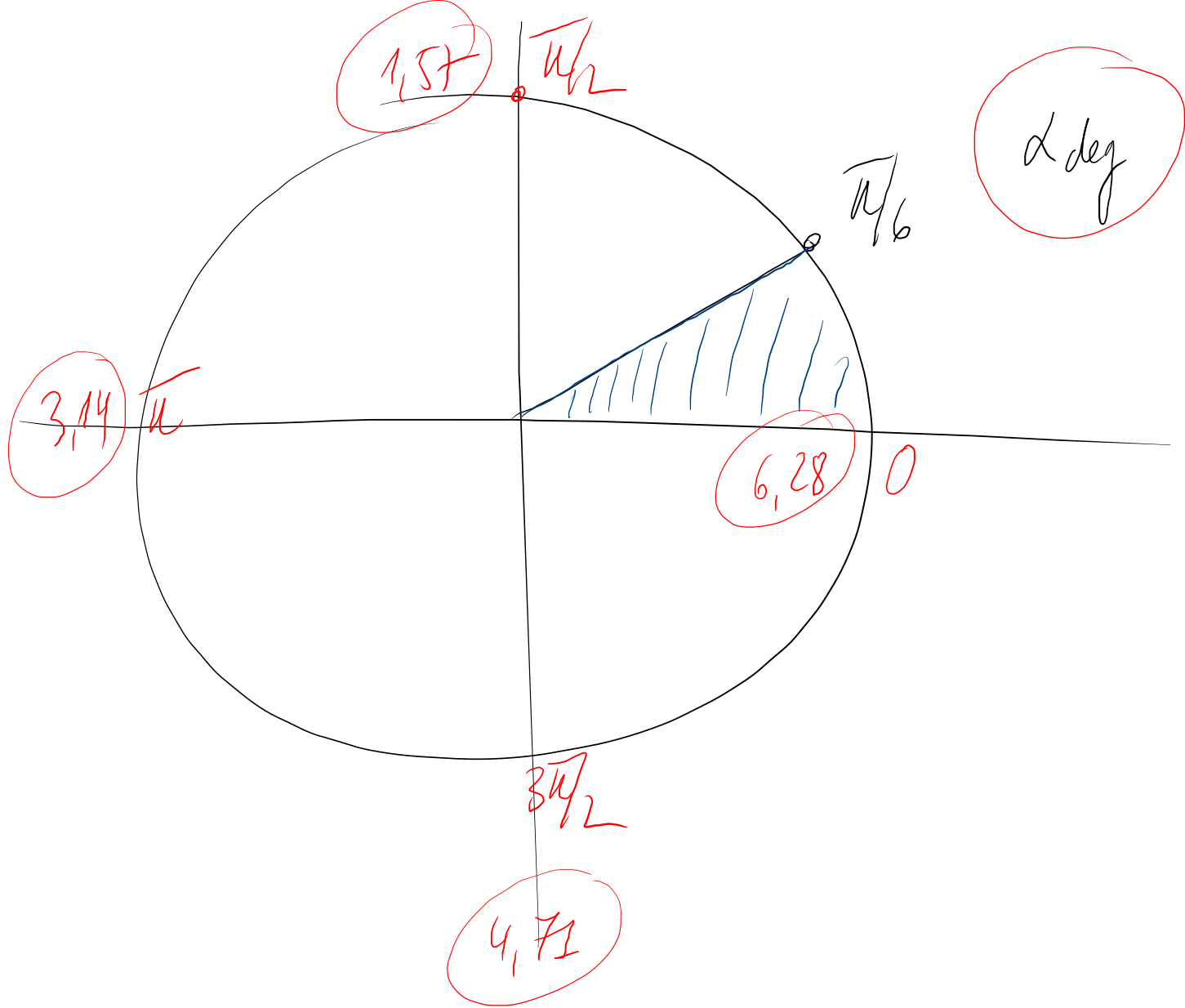
$$\alpha = \frac{\pi/6}{\pi} \cdot 180^\circ$$

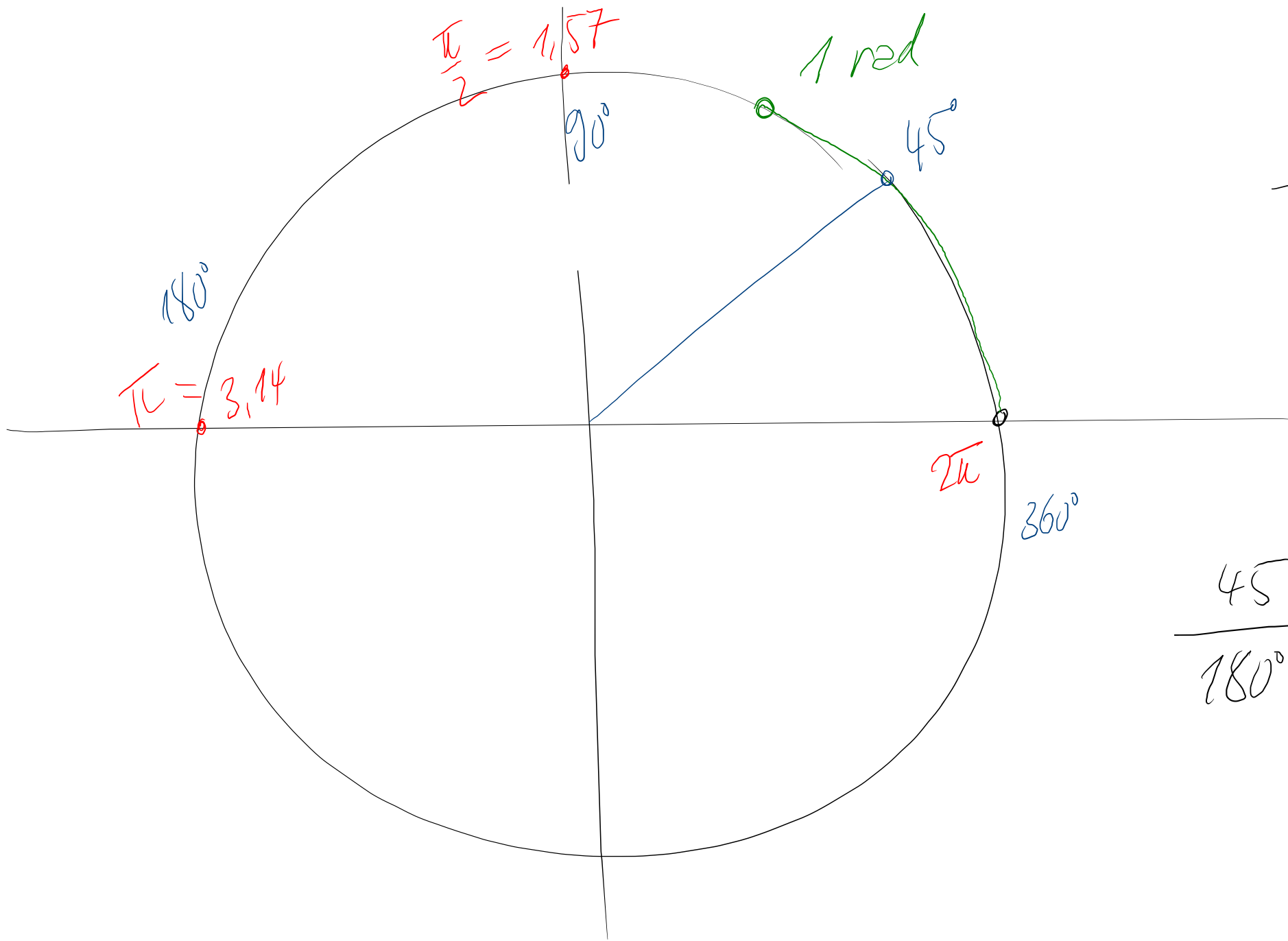
$$\frac{\frac{\pi}{6}}{\frac{2\pi}{1}} = \frac{\pi}{6} \cdot \frac{1}{2\pi}$$

$$\frac{\frac{\pi}{6}}{2}$$

$$\frac{\pi}{12}$$

$$\frac{\frac{\pi}{6}}{(2 \cdot \pi)}$$





$$\frac{1}{\pi} = \frac{\alpha_{deg}}{180}$$

$$\frac{45}{180} \cdot \pi = \alpha_{rad} = \frac{\pi}{4}$$

$$\alpha = 1024720^\circ$$

