Trigo

cos
sin
tan
} fonctions

Fonctions

① ED$_f$, zéros, signe

②

résoudre une éq.

$$\boxed{\cos(x) = 0{,}8}$$

$0{,}8 \quad \boxed{\cos}^{\;\cos^{-1}}$

$$\boxed{\cos(x) = 8}$$

Pas de sol.

$\emptyset$

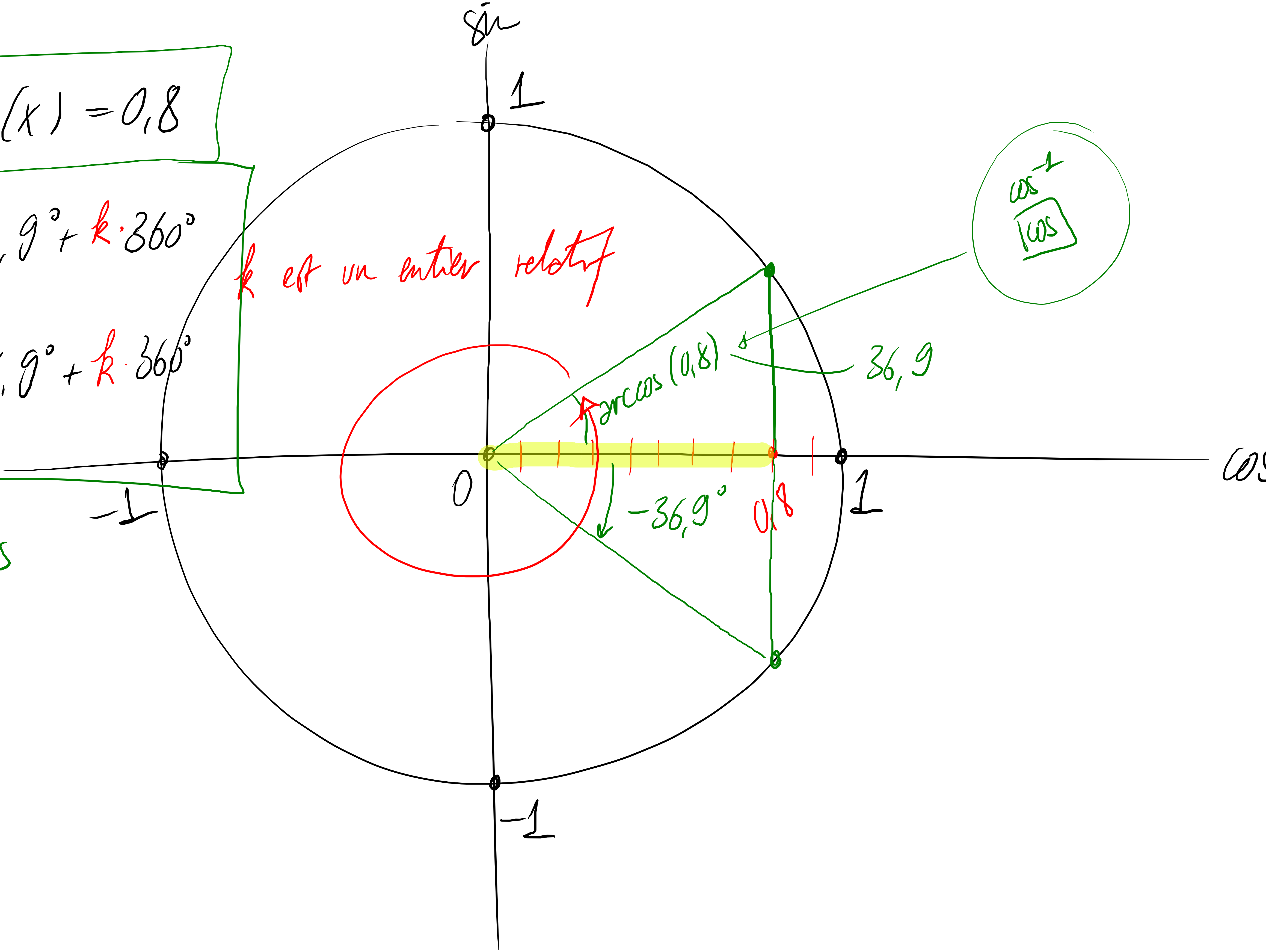
$$\boxed{\cos(x) = 0{,}8}$$

$$x = 36{,}9° + k \cdot 360°$$

$$x = -36{,}9° + k \cdot 360°$$

Solutions

k est un entier relatif



$$\boxed{\cos(x) = -\frac{1}{2}}$$

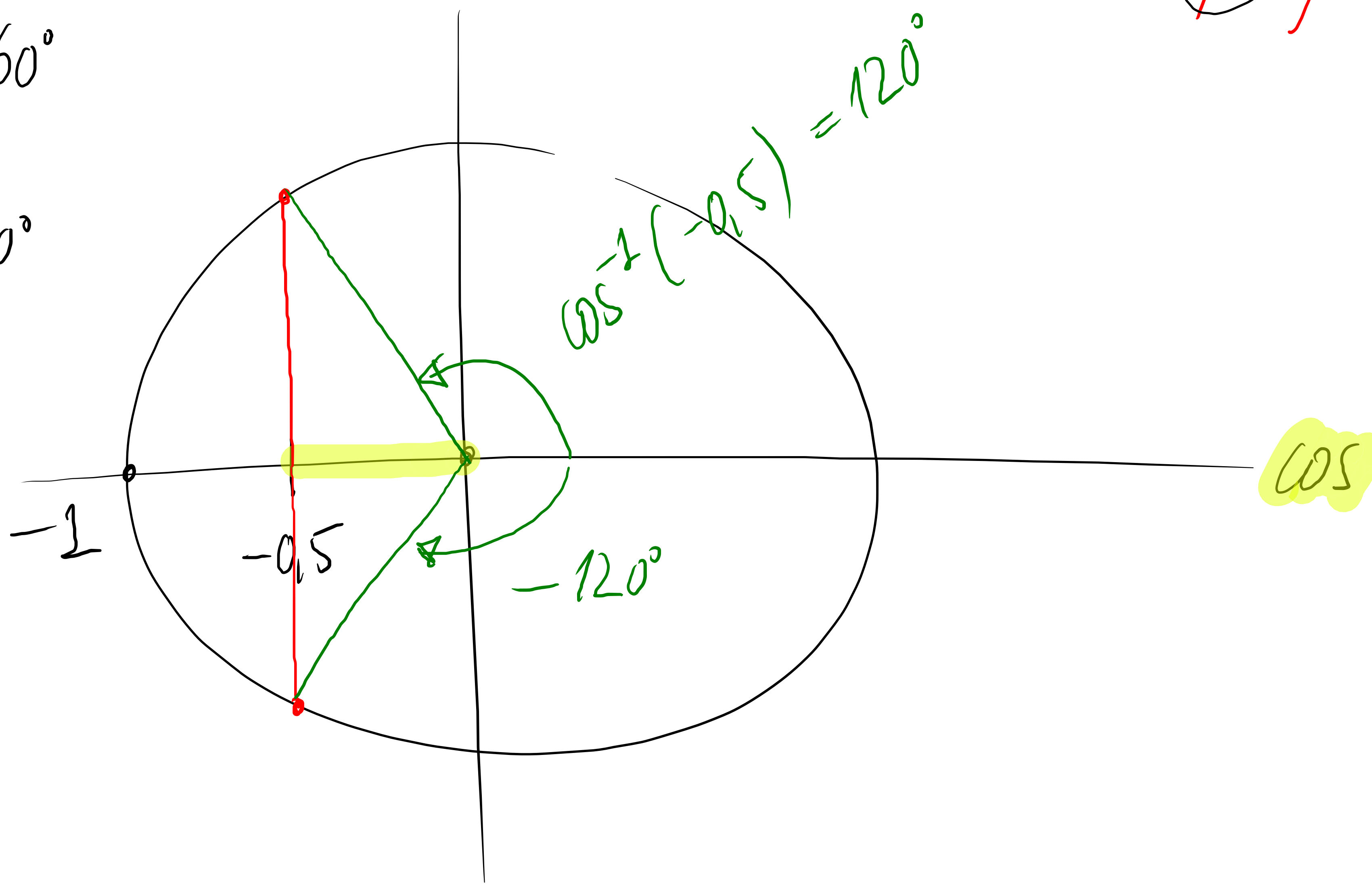
4.3.3

a) b) c)

e) f) g) h)

$x = 120° + k \cdot 360°$

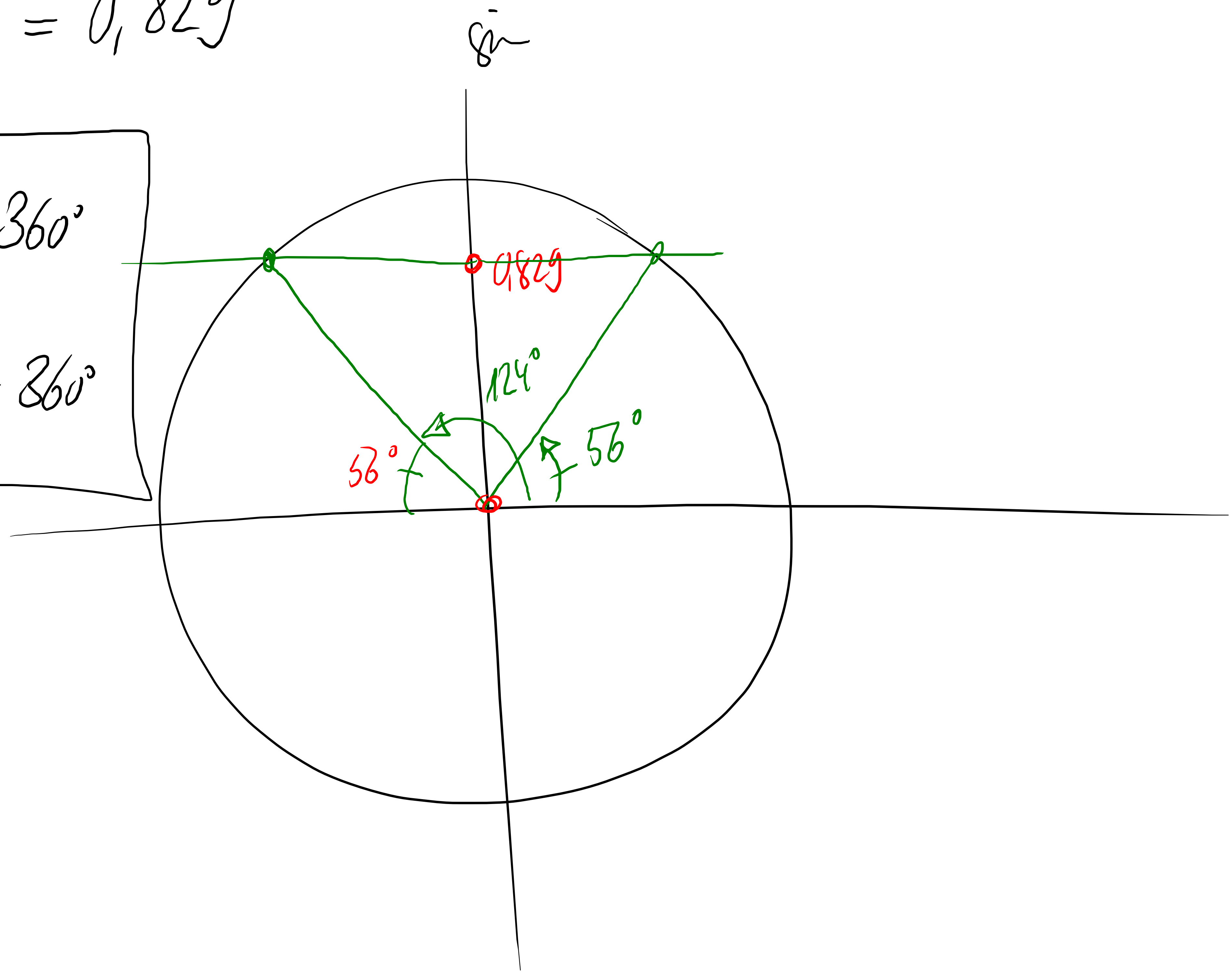
$x = -120° + k \cdot 360°$



$\sin(t) = 0,829$

$t_1 = 56° + k \cdot 360°$

$t_2 = 124° + k \cdot 360°$

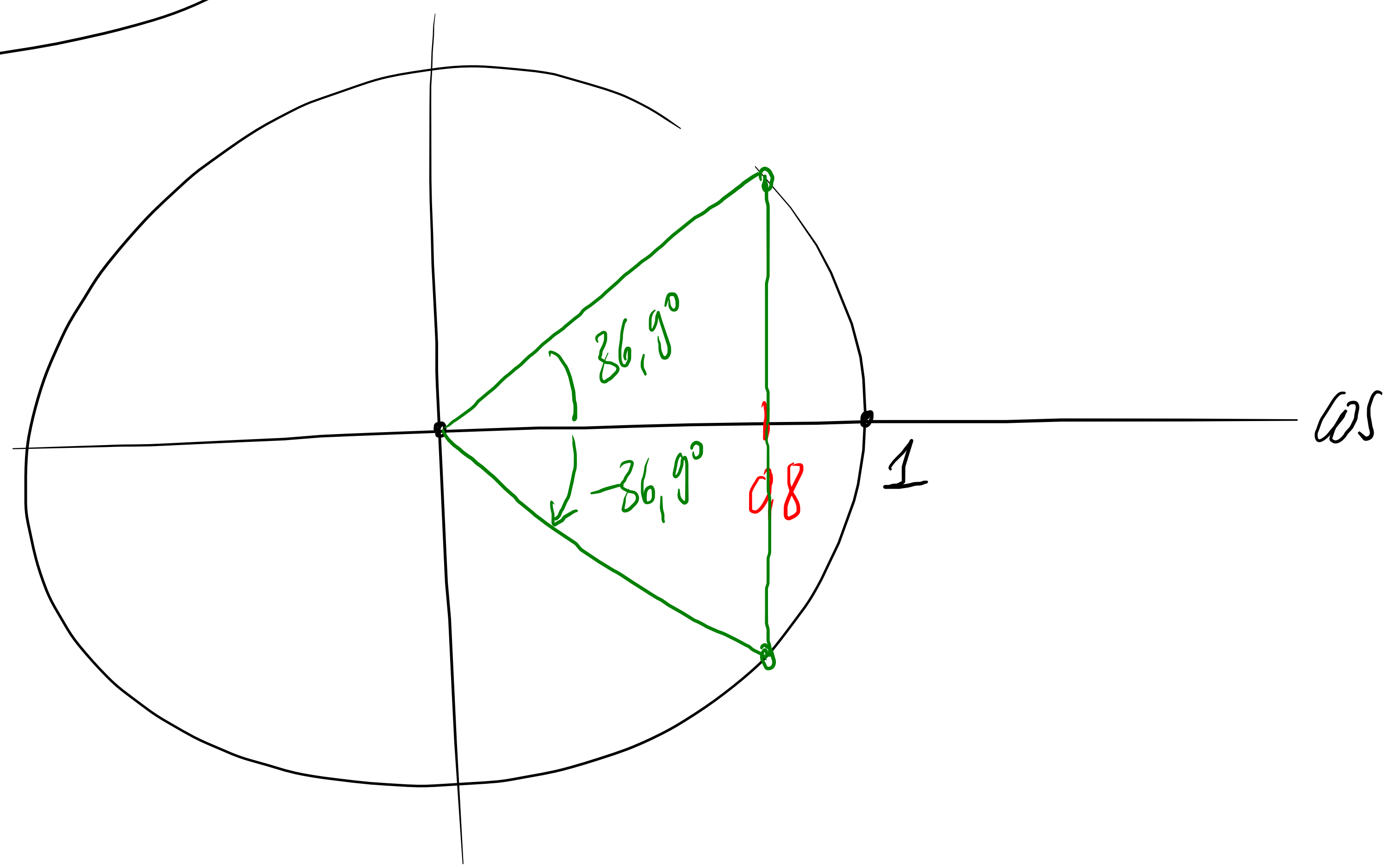


$\cos(x) = 0{,}8$

$x = \cos^{-1}(0{,}8) \simeq 36{,}9°$

$x = \pm 36{,}9° + k \cdot 360°$

entier relatif

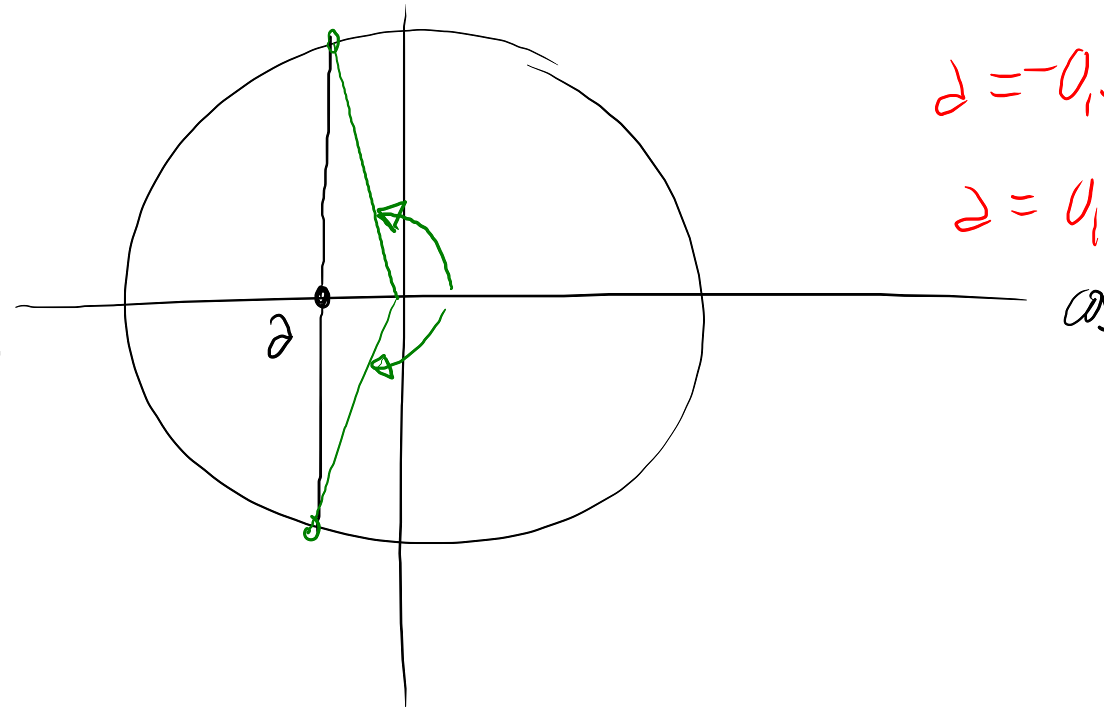


4.3.3

a
b
d
f
h

$$\boxed{\cos(x) = a}$$

$$x = \pm \cos^{-1}(a) + k \cdot 360°$$



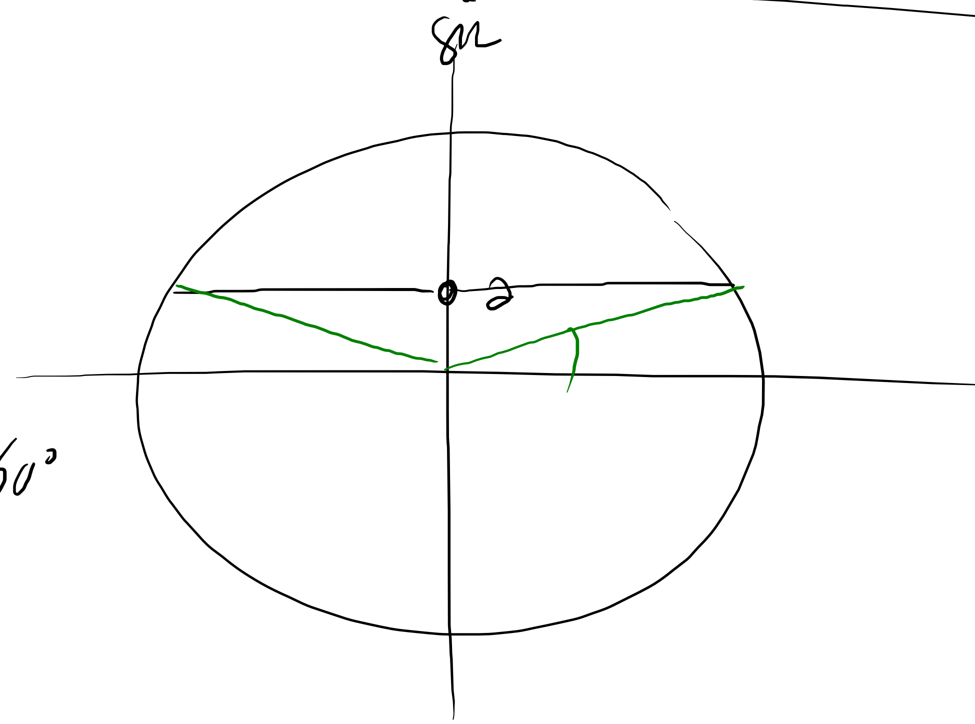
a = −0,3

a = 0,7

$$\boxed{\sin(x) = a}$$

$$x = \sin^{-1}(a) + k \cdot 360°$$

$$x = 180° - \sin^{-1}(a) + k \cdot 360°$$



a = 0,99

a = −0,6

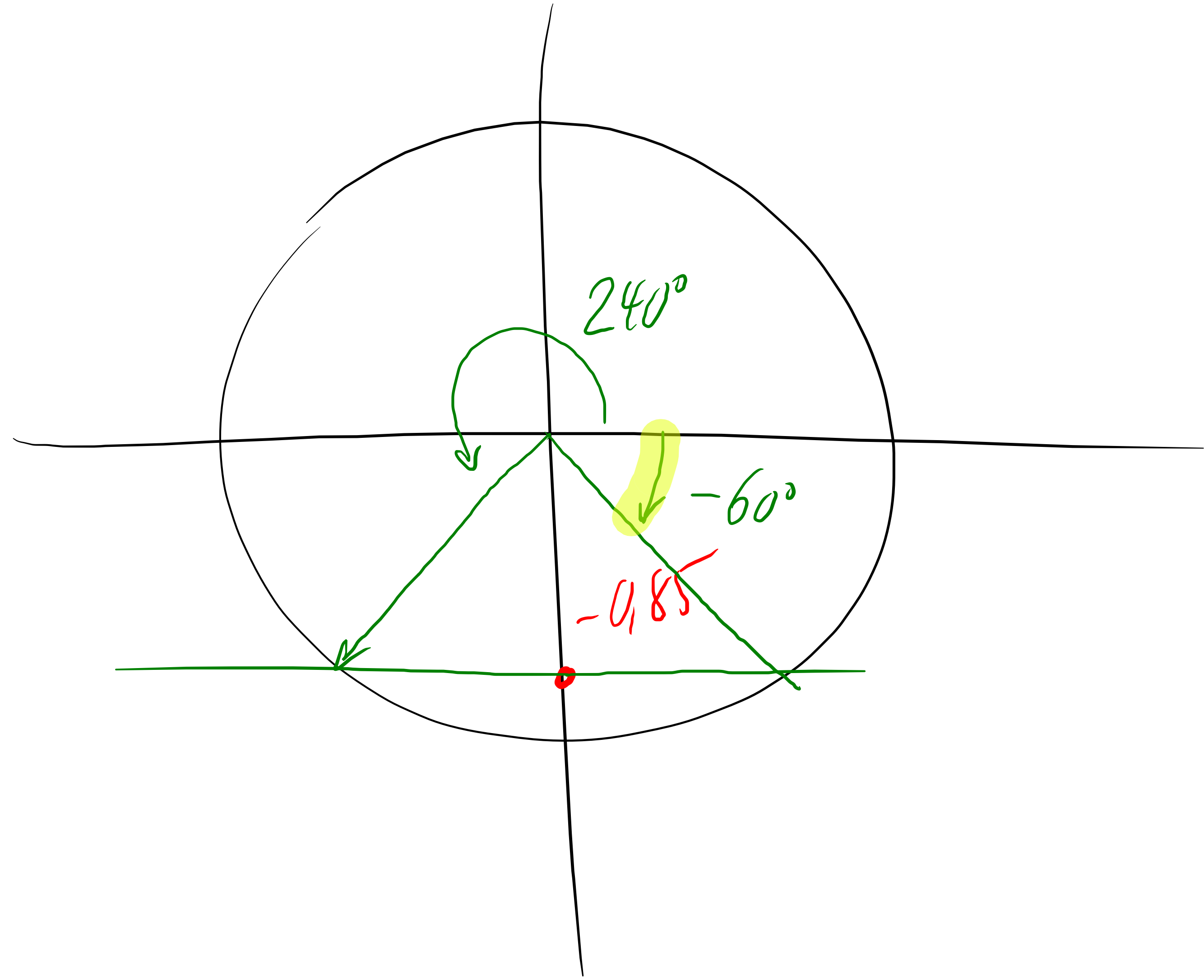
$$a = -\frac{\sqrt{3}}{2} \simeq -0{,}85$$

$$\sin(3t) = a$$

$$3t = -60^\circ + k \cdot 360^\circ$$

$$3t = 240^\circ + k \cdot 360^\circ$$

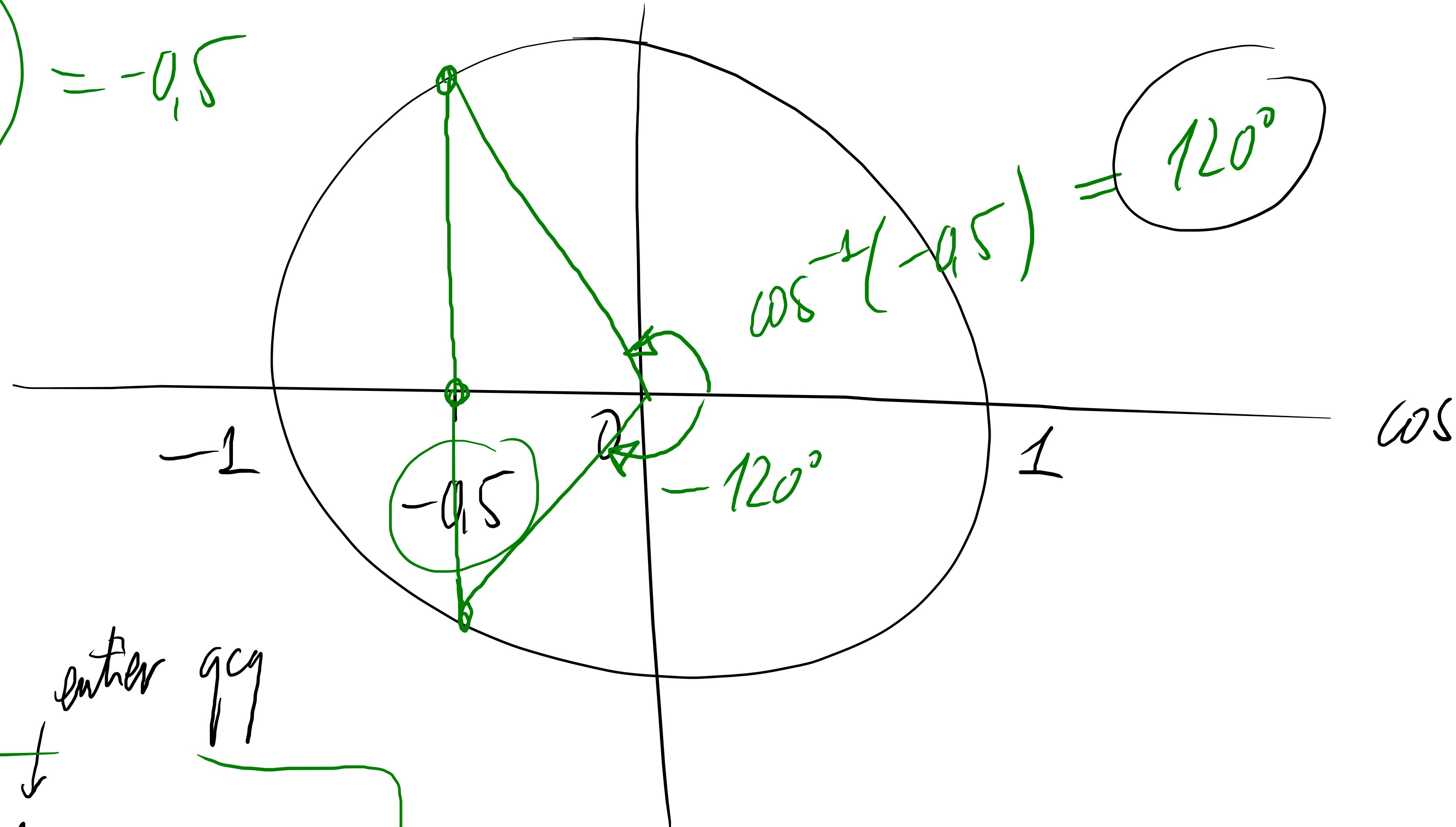
$$\boxed{\begin{aligned} t &= -20^\circ + k \cdot 120^\circ \\ t &= 80^\circ + k \cdot 120^\circ \end{aligned}}$$



$$a = -\frac{1}{2} = -0{,}5$$

$$\boxed{\cos(x) = -0{,}5}$$

$$x = \cos^{-1}(-0{,}5)$$



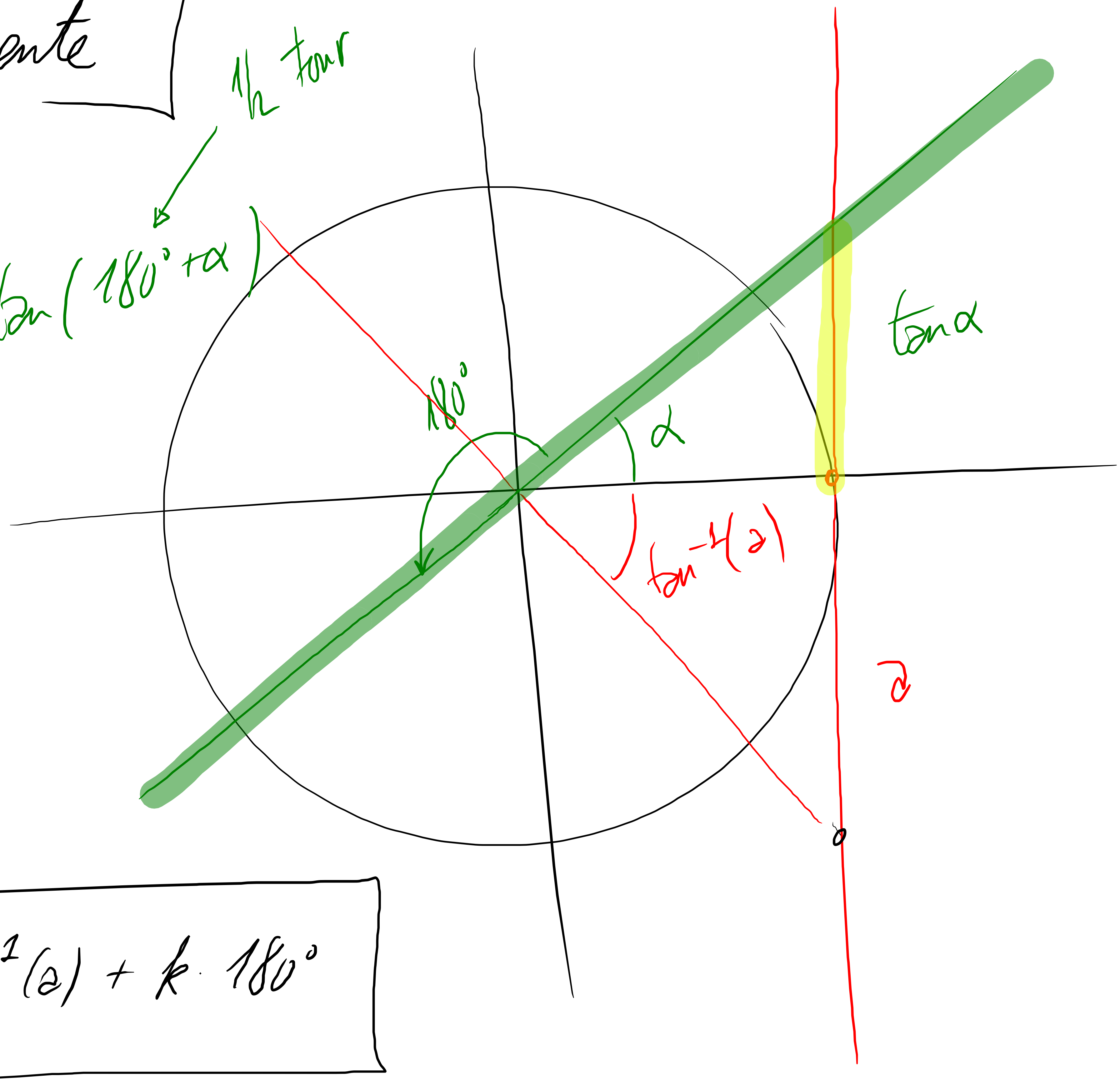
entier qcq

$$x = 120° + k \cdot 360°$$

$$x = -120° + k \cdot 360°$$

Tangente

$\tan(\alpha) = \tan(180° + \alpha)$

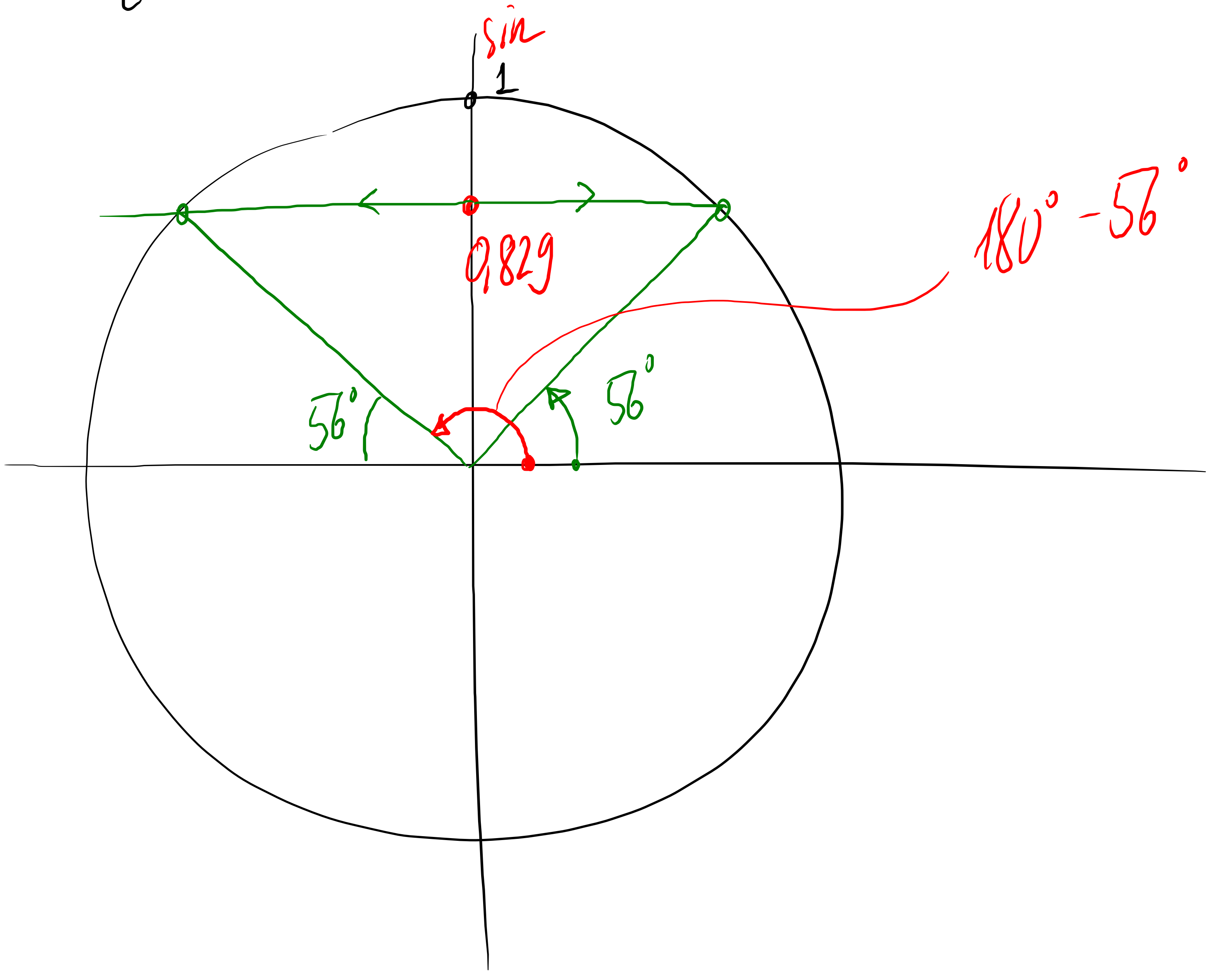


$\tan(x) = a$

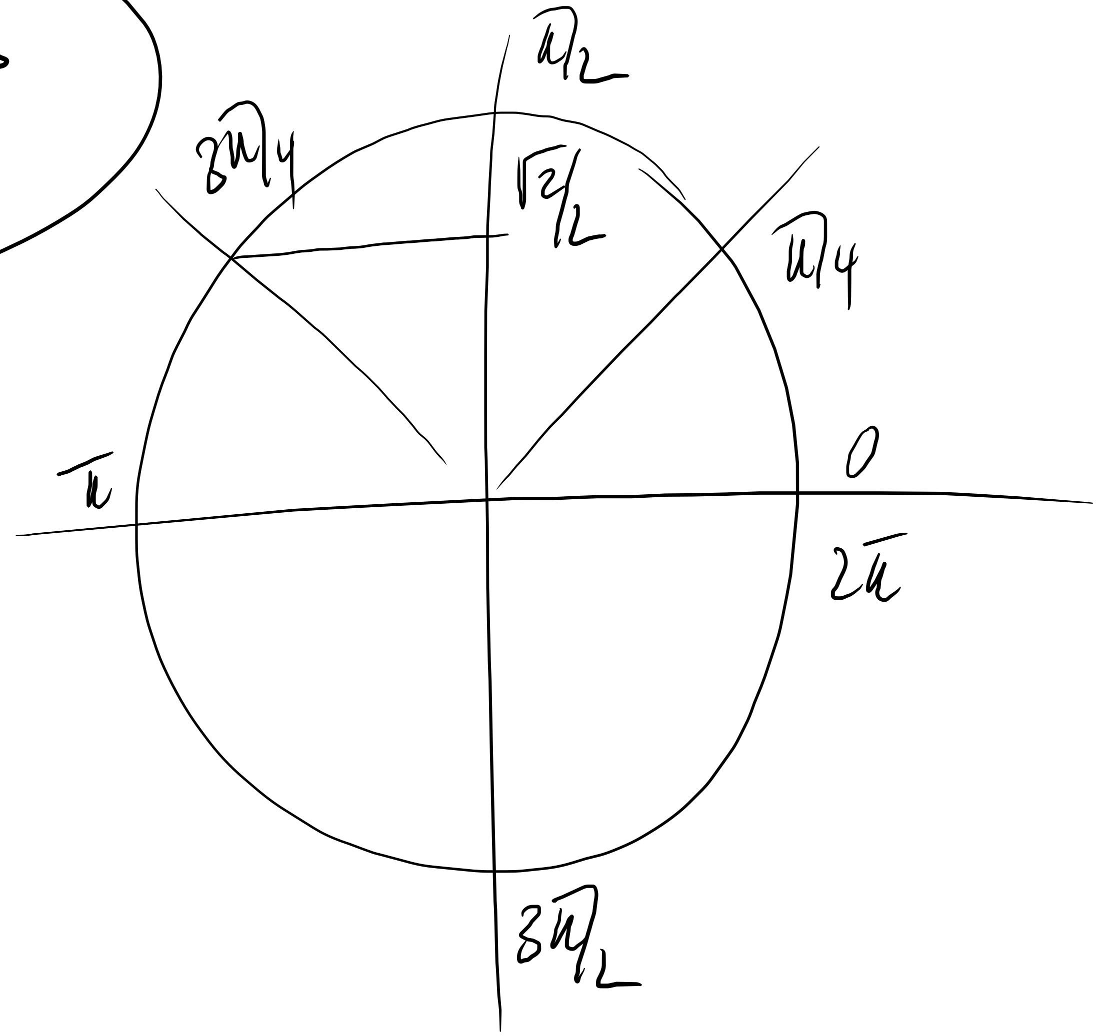
$$\boxed{x = \tan^{-1}(a) + k \cdot 180°}$$

$\sin(t) = 0{,}829$

$t = \sin^{-1}(0{,}829) \simeq 56^\circ + k \cdot 360^\circ$

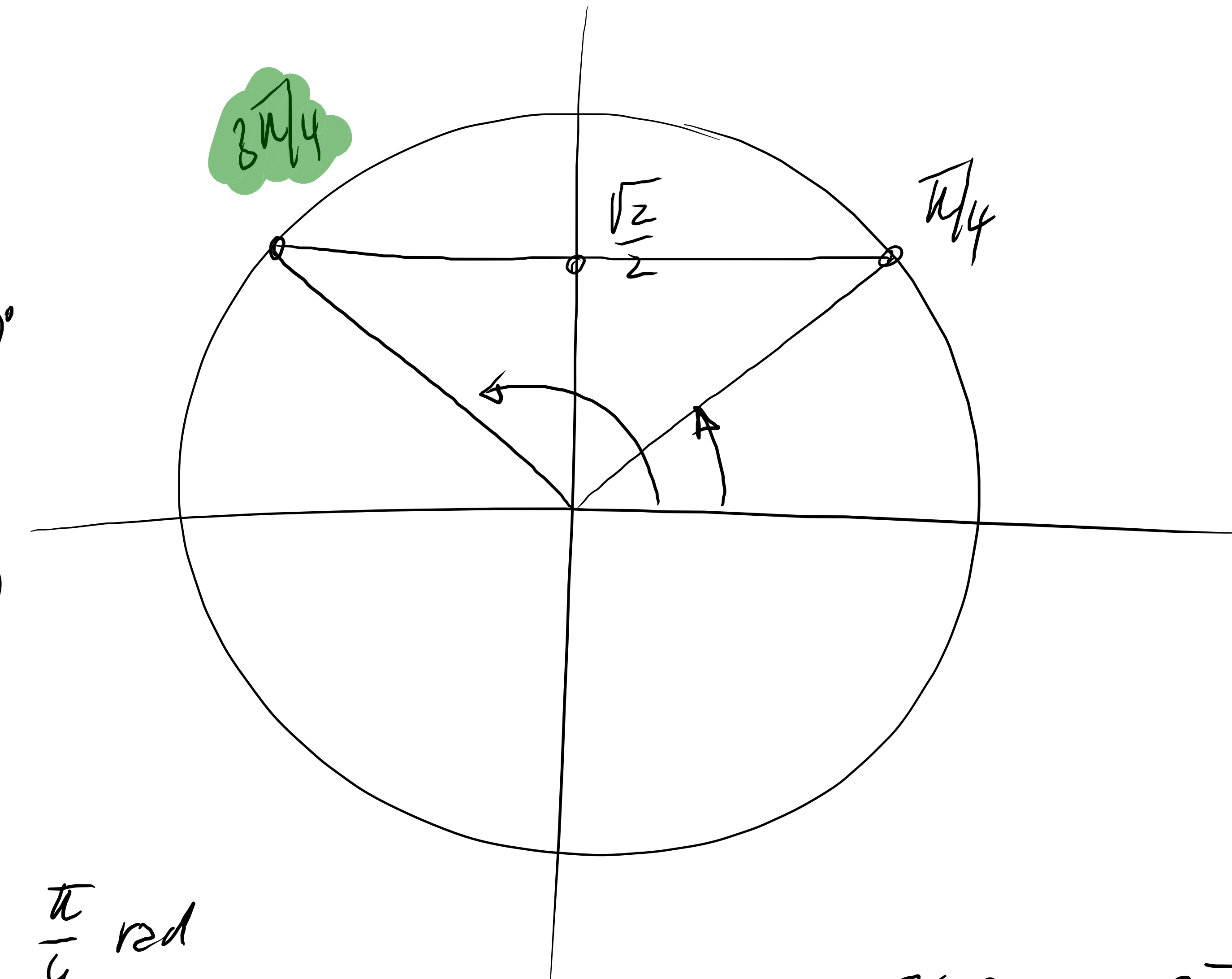


RADIANS



4.3.4 a)

$$\sin\left(\frac{2t}{3}+\frac{\pi}{4}\right) = \frac{\sqrt{2}}{2}$$

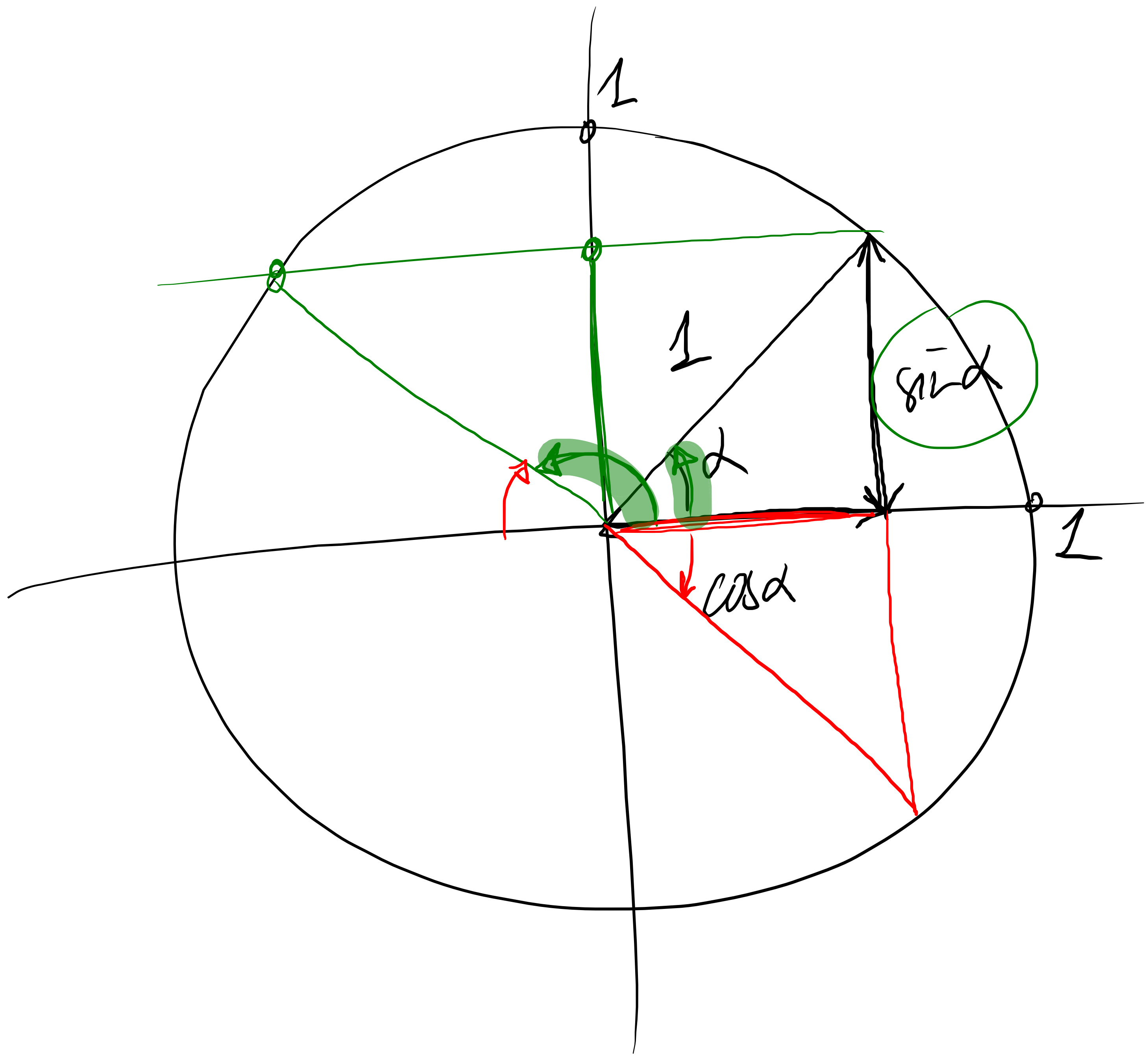


360°

$$\frac{2t}{3}+\frac{\pi}{4} = \frac{\pi}{4} + k\cdot 2\pi$$

$$\sin^{-1}\left(\frac{\sqrt{2}}{2}\right) = 45^\circ \leftrightarrow \frac{\pi}{4}\text{ rad}$$

$$360^\circ \leftrightarrow 2\pi\text{ rad}$$


1
1
1
1
α
sin α
cos α