

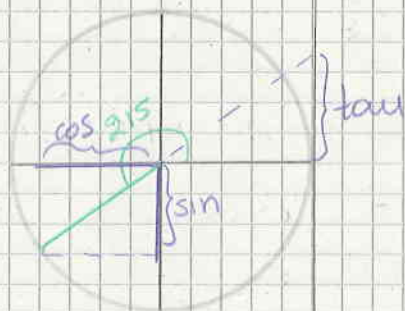
LDAR Niveau 1: Trigo 3-Trigo

2) $\alpha = 260^\circ \rightarrow \alpha_r = \frac{\pi \cdot 260}{180} = \alpha_r = \frac{13\pi}{9}$

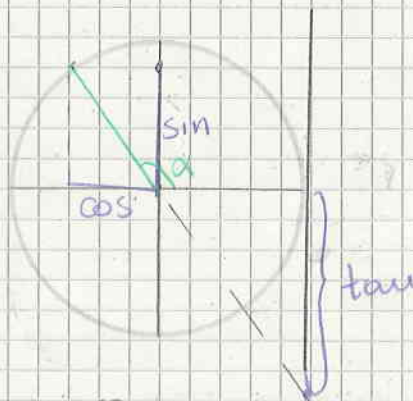
3) $\alpha = 20 \text{ rad} \rightarrow \alpha^\circ = \frac{180 \cdot 20}{\pi} = 1145.91^\circ = 3 \cdot 360 + 65.91^\circ$

Alors $\varphi = 65.91^\circ$

4)



5)



6) $\sin \alpha = -\frac{\sqrt{3}}{2} \Rightarrow \begin{cases} \alpha = -60^\circ + k360^\circ \text{ (1)} \\ \alpha = 180 + 60 + k360 = 240 + k360^\circ \text{ (2)} \end{cases}$

(1) $k=1 \quad \alpha_1 = 300^\circ$ (2) $k=0 \quad \alpha_2 = 240^\circ$

7) $\tan \alpha = -1 \Rightarrow \alpha = -\frac{\pi}{4} + k\pi$

8) $\tan x = 4 \quad x \in \mathbb{Q}_{III}$

$$\tan x = \frac{\sin x}{\cos x} = 4 \Rightarrow \sin x = 4 \cos x$$

$$\sin^2 x + \cos^2 x = 1 \Rightarrow 16 \cos^2 x + \cos^2 x = 1 \Rightarrow$$

$$\Rightarrow 17 \cos^2 x = 1 \Rightarrow \cos^2 x = \frac{1}{17} \Rightarrow \cos x = \pm \frac{1}{\sqrt{17}}$$

$$x \in \mathbb{Q}_{III} \Rightarrow \cos x = -\frac{1}{\sqrt{17}} = -\frac{\sqrt{17}}{17}$$

$$\sin x = -\frac{4\sqrt{17}}{17}$$