(1) $\left.\begin{array}{l}\sin\alpha = \cos\alpha \\ \sin^2\alpha + \cos^2\alpha = 1\end{array}\right\} \Rightarrow$ $\cos^2\alpha + \cos^2\alpha = 1$

$2\cos^2\alpha = 1$

$\cos^2\alpha = \frac{1}{2}$

$\cos\alpha = \pm\frac{1}{\sqrt{2}}$

(2) $\left.\begin{array}{l}\sin\alpha = -\cos\alpha \\ \sin^2\alpha + \cos^2\alpha = 1\end{array}\right\} \Rightarrow$ $(-\cos\alpha)^2 + \cos^2\alpha = 1$

$\cos^2\alpha + \cos^2\alpha = 1$

$2\cos^2\alpha = 1$

$\cos^2\alpha = \frac{1}{2}$

$\cos\alpha = \pm\sqrt{\frac{1}{2}} = \pm\frac{1}{\sqrt{2}}$

Mateix resultat que en el cas (1)

Per tant,

són els angles α tals que:

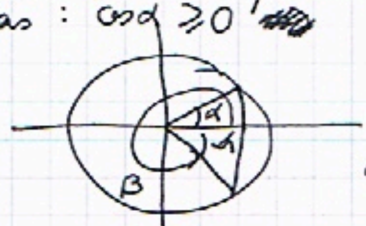
$\alpha = 45^\circ + 90^\circ K \qquad K \in \mathbb{Z}$

<u>En radians</u>:

$\alpha = \frac{\pi}{4}\text{ rad} + \frac{\pi}{2}K\text{ rad} \qquad K \in \mathbb{Z}$

b) $\cos\alpha = \cos\beta \qquad 0^\circ \leq \alpha, \beta \leq 360^\circ$

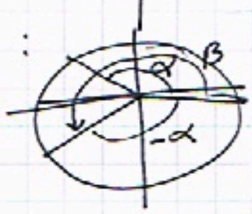
1r cas: $\cos\alpha \geq 0$



$\alpha + \beta = 360^\circ$

2n cas:

$\cos\alpha \leq 0$



$\alpha + \beta = 360^\circ$

Per tant $\boxed{\alpha + \beta = 360^\circ}$