

1/2

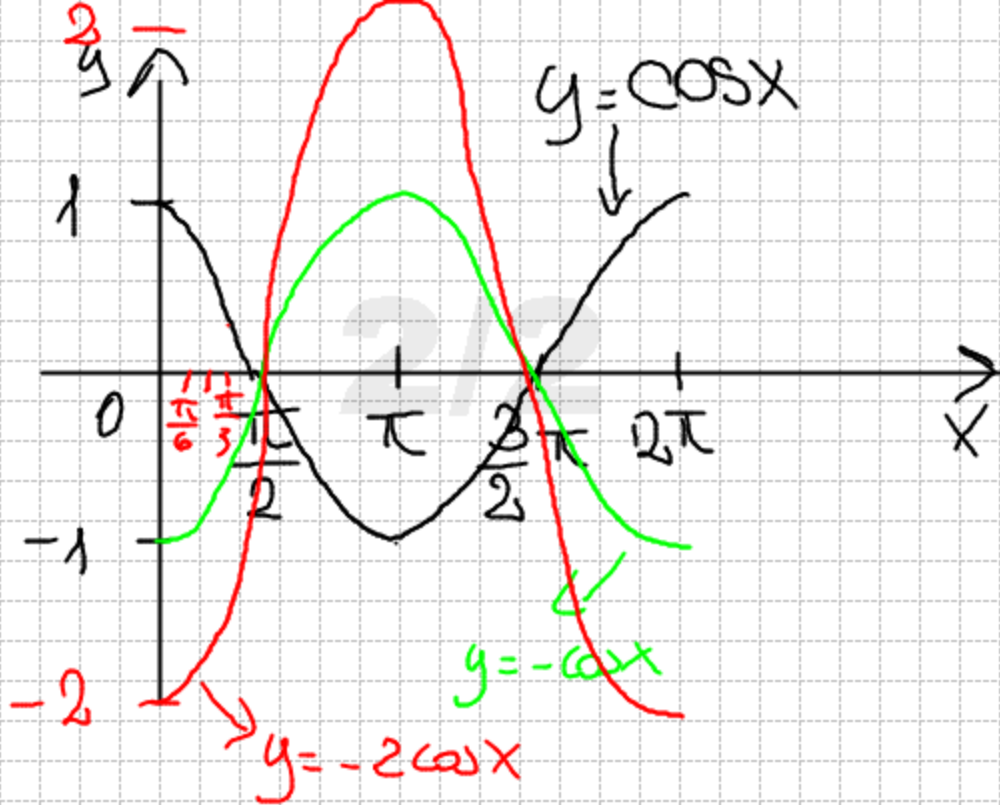
$$2 \sin \alpha - \cos \alpha - \sin \alpha + 3 \cos \alpha = \sin \alpha + 2 \cos \alpha$$

$$\sin \alpha + 2 \cos \alpha = \sin \alpha + 2 \cos \alpha$$

p. 30 ES. n.

32) $f(x) = -2\cos x$

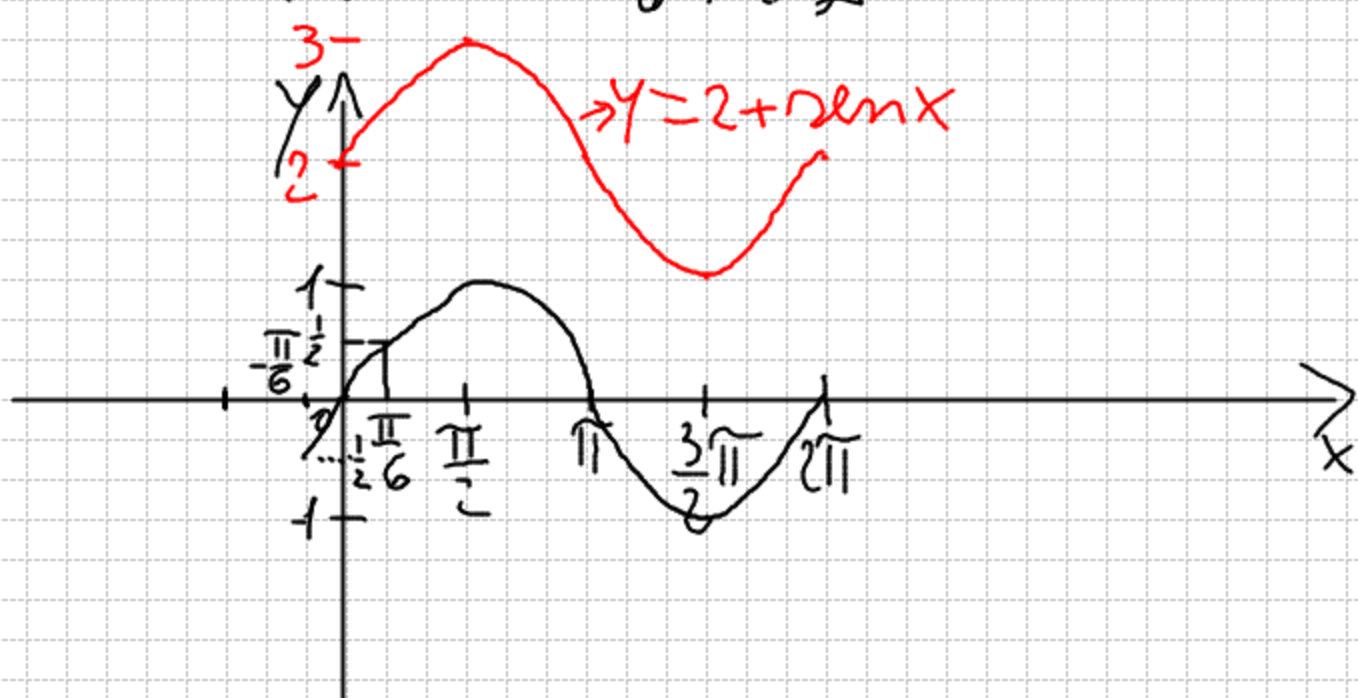
$x \in [0; \frac{\pi}{3}]$



$-2 < 2\cos x < 2$	x	y
	0	-2
	$\frac{\pi}{3}$	-1

$y = -2\cos\frac{\pi}{3} \Rightarrow y = -2(\frac{1}{2}) = -1$

b) $g(x) = 2 + \sin x$ $x \in [-\frac{\pi}{6}, \frac{\pi}{6}]$



Se $x = -\frac{\pi}{6}$ $y = 2 + \sin(-\frac{\pi}{6}) \Rightarrow y = 2 - \frac{1}{2} \Rightarrow y = \frac{3}{2} m$

Se $x = \frac{\pi}{6}$ $y = 2 + \sin\frac{\pi}{6} \Rightarrow y = 2 + \frac{1}{2} \Rightarrow y = \frac{5}{2} M$

$\tan \alpha = \frac{\sin \alpha}{\cos \alpha}$

$\triangle OHP \cong \triangle OAT$

$\overline{OA} = \cos \alpha$

$\overline{PH} = \sin \alpha$

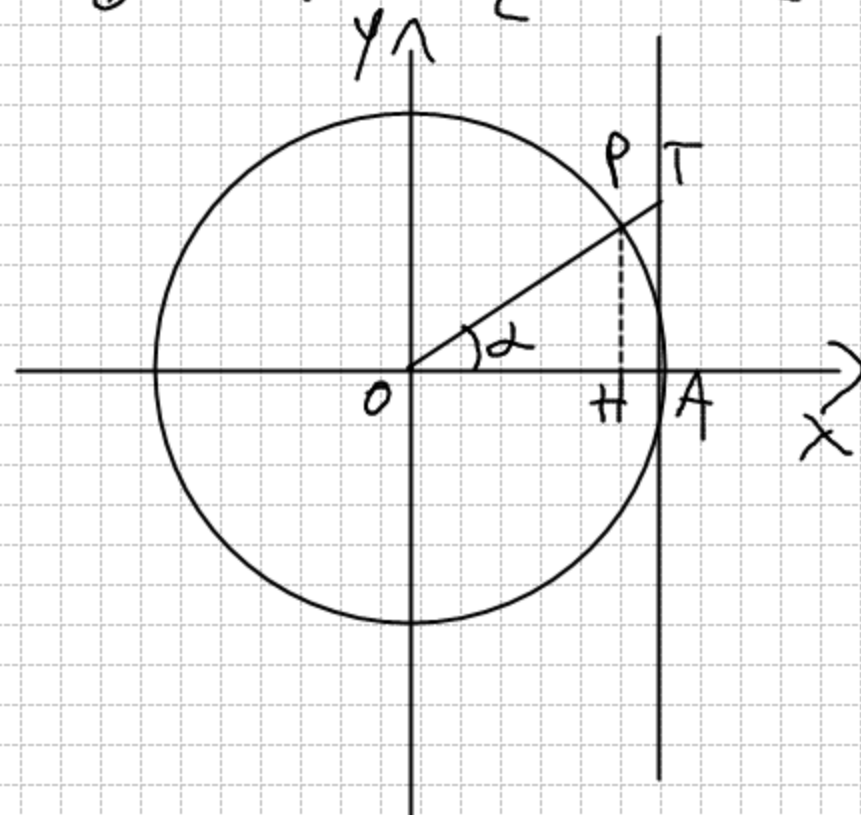
$\overline{OA} = \overline{PO} = 1$

$\overline{TA} = \tan \alpha$

$\overline{OH} : \overline{PH} = \overline{OA} : \overline{TA}$

$\cos \alpha : \sin \alpha = 1 : \tan \alpha$

$\tan \alpha = \frac{\sin \alpha \cdot 1}{\cos \alpha}$



1ª regola fondamentale

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

$\overline{OP} = \overline{OA} = 1$ (raggio)

$\overline{PH} = \sin x$

$\overline{OH} = \cos x$

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

$x^2 + y^2 = 1 \rightarrow \text{eq. circ.}$

