

$$f(x) = 3 - 2\pi \sqrt{\frac{x}{2}}$$

$$\omega = \frac{1}{2}$$

$$p = -2$$

$$c = 3$$

$$f(x) = p\pi\omega x + c$$

$$T = \frac{2\pi}{\omega} = \frac{2\pi}{\frac{1}{2}} = 4\pi$$

$$\Rightarrow \underline{T = 4\pi},$$

 период.

$$-1 \leq \pi \sqrt{\frac{x}{2}} \leq 1$$

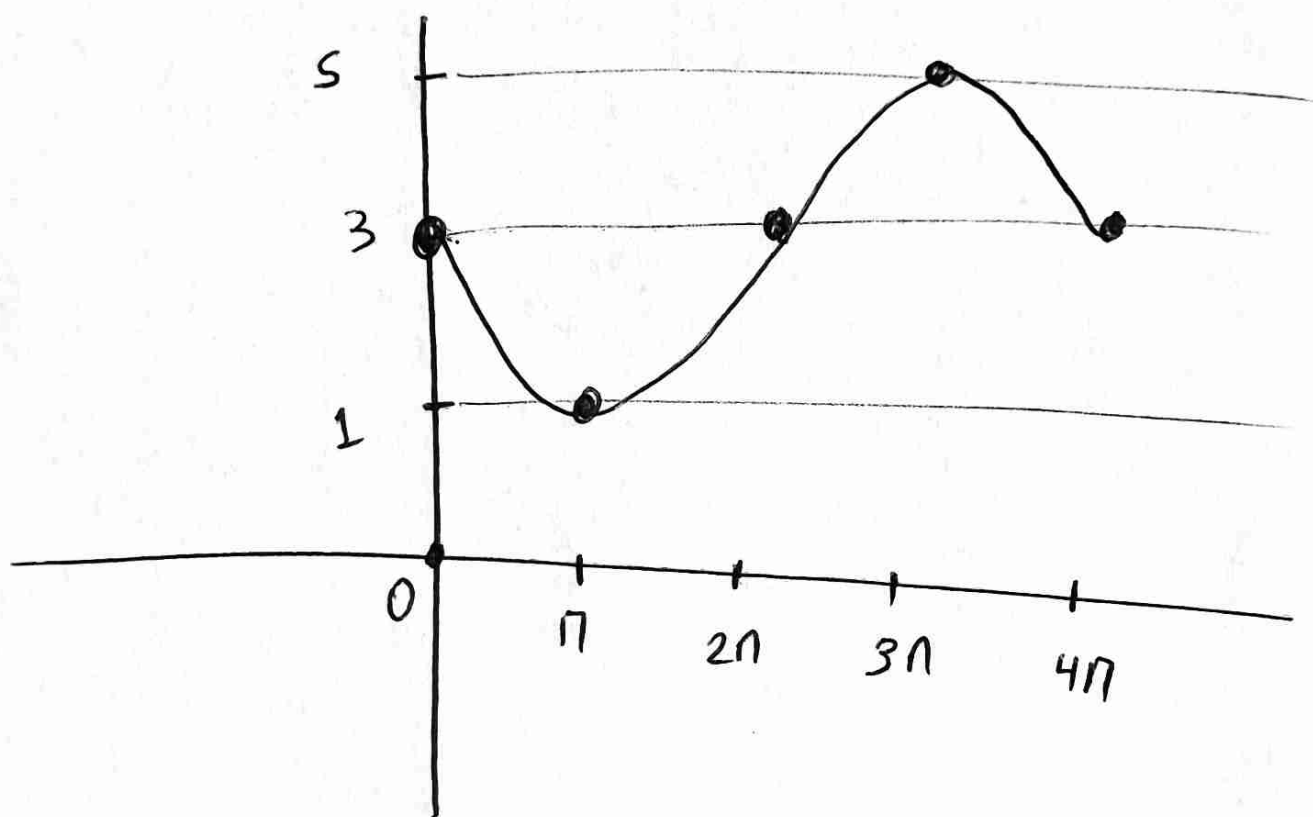
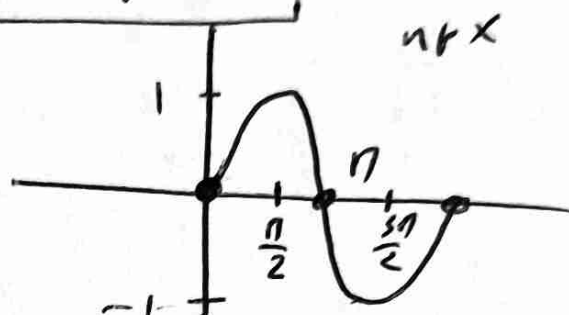
$$2 \geq -2\pi \sqrt{\frac{x}{2}} \geq -2$$

$$5 \geq 3 - 2\pi \sqrt{\frac{x}{2}} \geq 1$$

$$\underline{\text{Max } f = 5}$$

$$\underline{\text{Min } f = 1}$$

$\frac{x}{2}$	0	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$	2π
x	0	π	2π	3π	4π
$\cos \frac{x}{2}$	0	1	0	-1	0
$-2\cos \frac{x}{2}$	0	-2	0	2	0
$f(x)$	3	1	3	5	3



$$f(x) = 2\sigma w 2x - 2$$

$$w = 2 \quad p = 2 \quad c = -2$$

$$f(x) = p\sigma w w x + c$$

$$T = \frac{2\eta}{w} = \frac{2\eta}{2} = \eta$$

$$\underline{T = \eta}$$

$$-1 \leq \sigma w 2x \leq 1$$

$$-2 \leq 2\sigma w 2x \leq 2$$

$$-4 \leq 2\sigma w 2x - 2 \leq 0$$

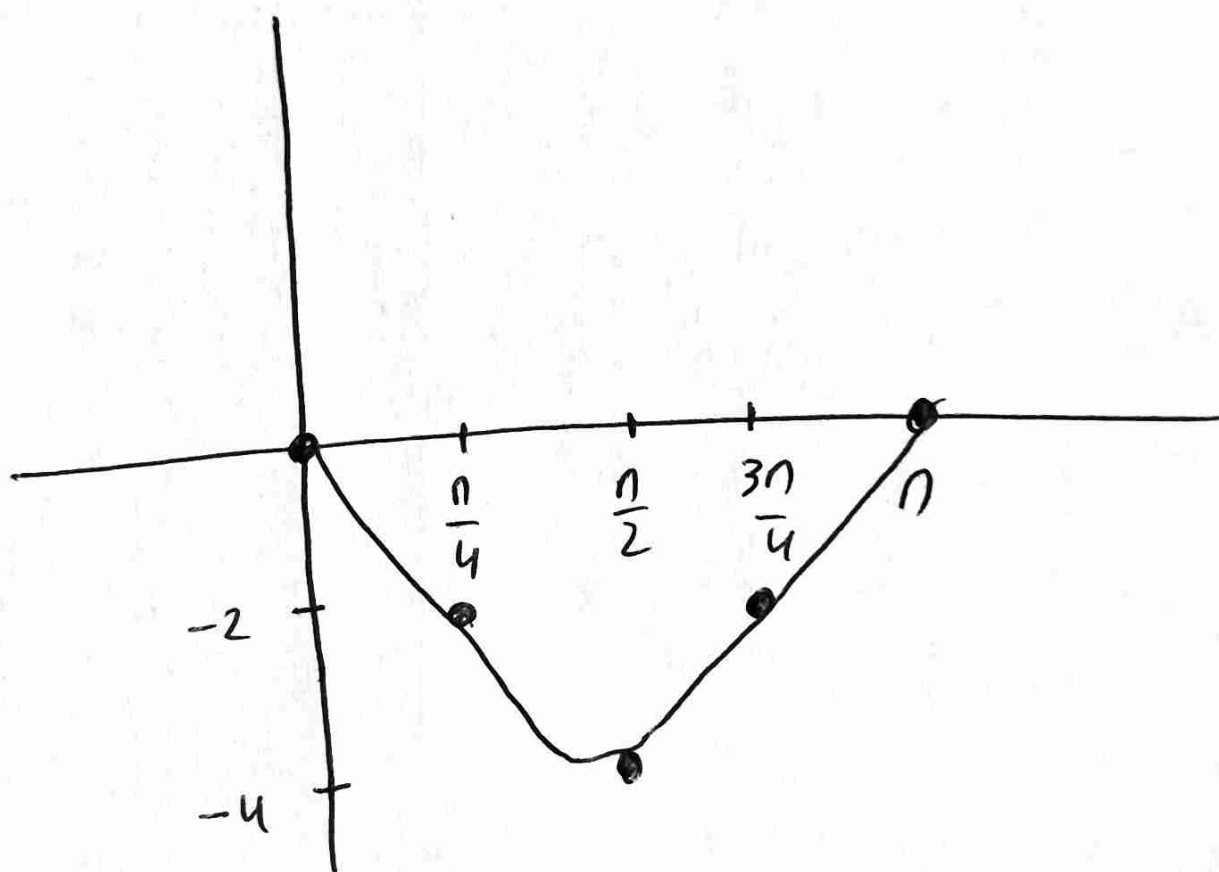
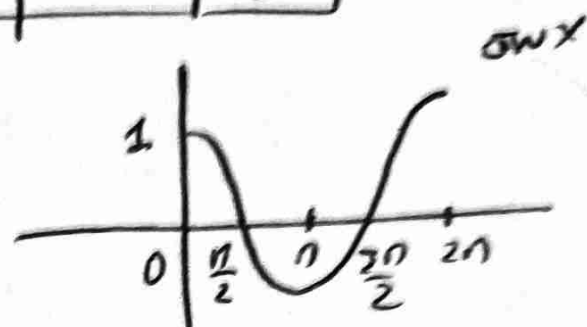
$$-4 \leq f(x) \leq 0$$

$$\text{Max } f = 0$$

$$\text{Min } f = -4$$

$2x$	0	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$	2π
x	0	$\frac{\pi}{4}$	$\frac{\pi}{2}$	$\frac{3\pi}{4}$	π
$\sin 2x$	1	0	-1	0	1
$2\sin 2x$	2	0	-2	0	2
$f(x)$	0	-2	-4	-2	0

$\rightarrow T = \pi$



Επομεο μαθημα

Ενοτητα 12

(17)

Σελ 162