

PAG. 896 N 34

$$a = 15 \text{ cm} = 0,15 \text{ m}$$

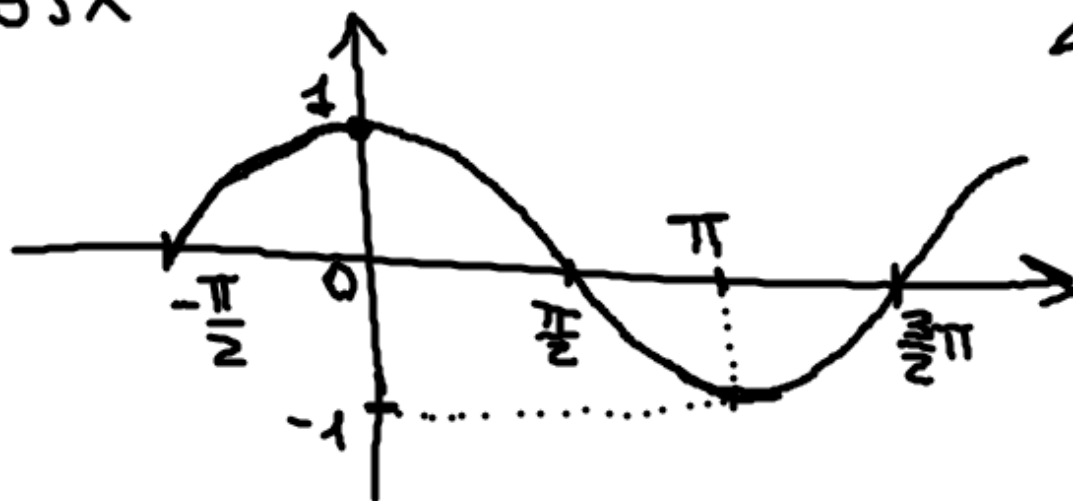
$$T = 1,5 \text{ s}$$

$$\omega = \frac{2\pi}{T} = \frac{2\pi}{1,5 \text{ s}} = 4,2 \frac{\text{rad}}{\text{s}}$$

$$f = \frac{1}{T} = \frac{1}{1,5 \text{ s}} = 0,67 \text{ Hz}$$

$$y(t) = (0,15 \text{ m}) \cos\left(4,2 \frac{\text{rad}}{\text{s}} t\right)$$

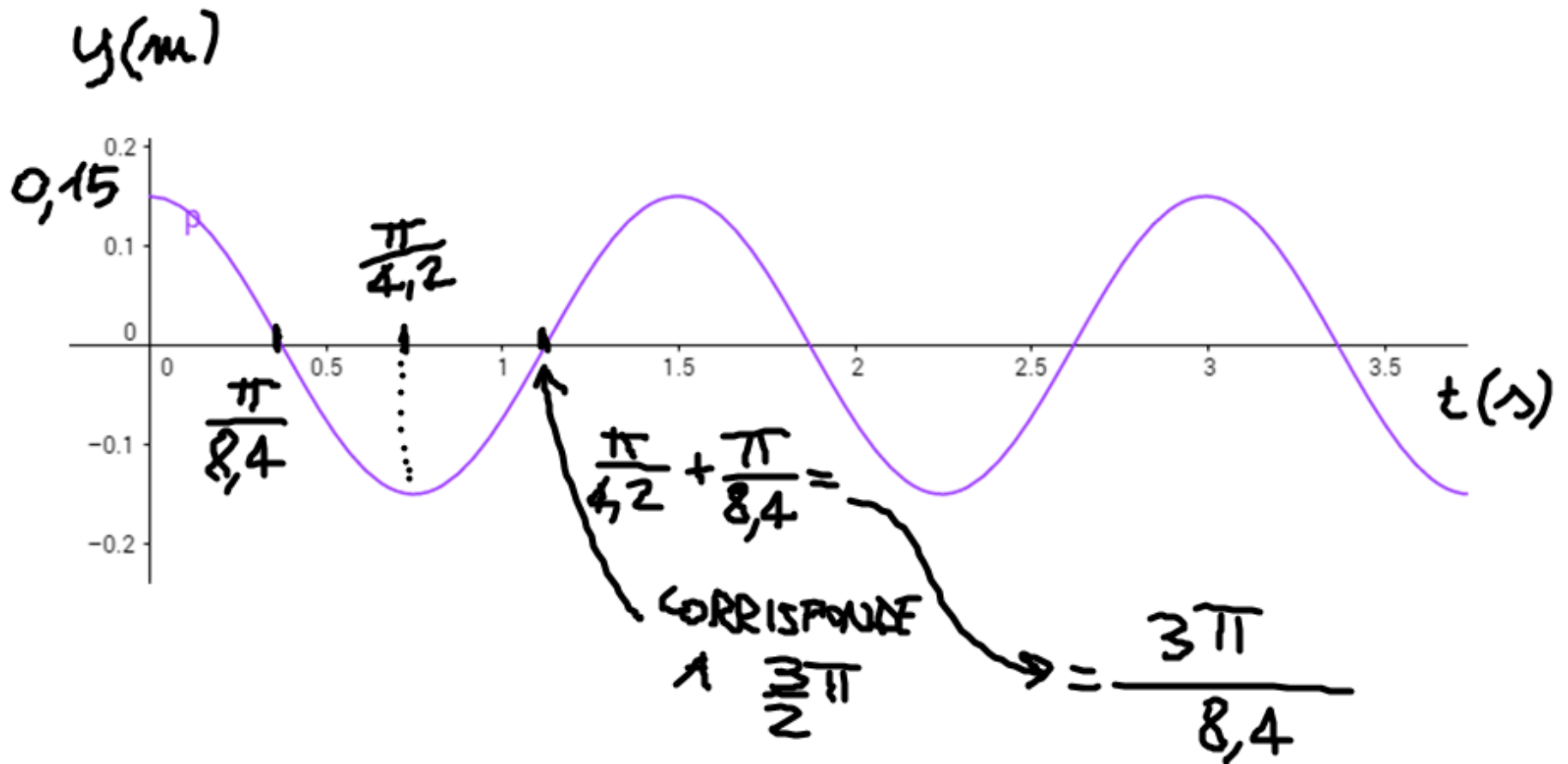
$$y = \cos x$$



$$4,2 x = \frac{\pi}{2}$$

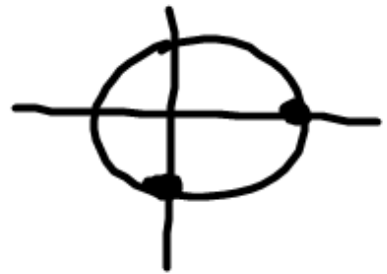
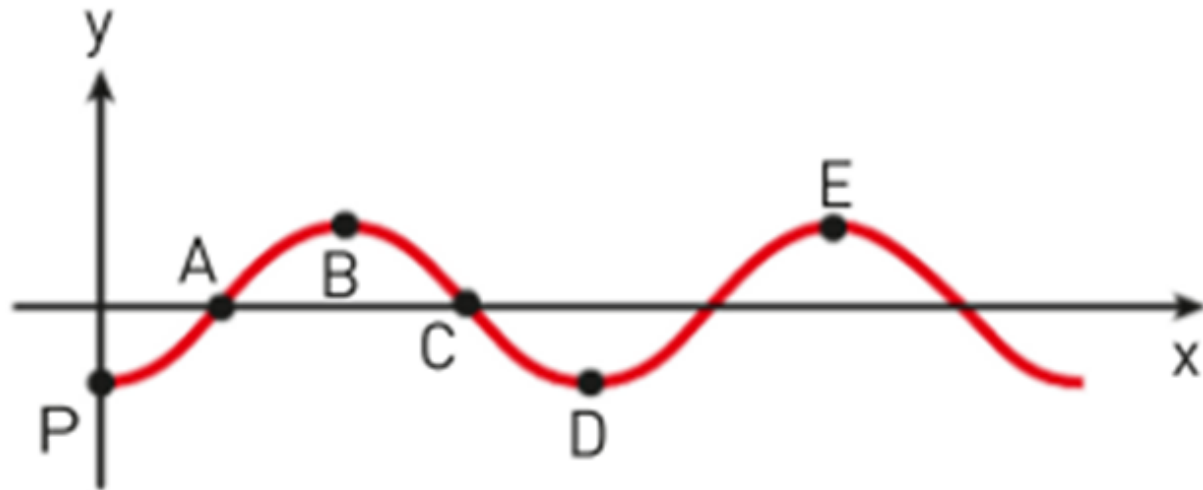
$\Downarrow$

$$x = \frac{\pi}{8,4}$$



$$y(t) = (0,15 \text{ m}) \cos\left(4,2 \frac{\text{rad}}{\text{s}} t\right)$$

N 35



$$\cos(x)$$

$$\cos\left(x + \frac{\pi}{2}\right)$$

$$x=0$$

$$\cos(0) = 1$$

$$\cos\left(\frac{\pi}{2}\right) = 0$$

PAG. 897 N 36

$$a = 0,70 \text{ m}$$

$$f = 2 \text{ Hz}$$

$$T = 0,5 \text{ s}$$

$$\varphi_0 = 0$$

$$y(t) = (0,70 \text{ m}) \cos\left(13 \frac{\text{rad}}{\text{s}} t\right)$$

$$\omega = 2\pi f = 13 \frac{\text{rad}}{\text{s}}$$

