

17.02.1202

GY

Абсолют:

$$x_1 = 2 + 5t$$

$$x_2 = 2\sqrt{3} + (5t + 50/6)$$

x = ?

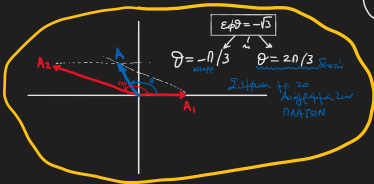
$$x = A_1 + A_2 = A + \varphi(\omega t + \theta)$$

$$A = \sqrt{A_1^2 + A_2^2 + 2A_1A_2 \cos \varphi} = \sqrt{2^2 + (2\sqrt{3})^2 + 2 \cdot 2 \cdot 2\sqrt{3} \cos \frac{50}{6}} = \sqrt{4 + 12 + 2\sqrt{3} \cdot (-\frac{1}{2})} = \sqrt{16 - \sqrt{3}} \approx \sqrt{16 - 1.7} = 2.9$$

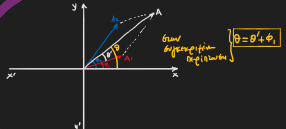
$$\varphi + \theta = \frac{A_2 \cdot \varphi}{A_1 + A_2 \cos \varphi} = \frac{2\sqrt{3} \cdot \frac{50}{6}}{2 + 2\sqrt{3} \cos \frac{50}{6}} = \frac{2\sqrt{3} \cdot \frac{1}{2}}{2 + 2\sqrt{3} \cdot (-\frac{1}{2})} = \frac{\sqrt{3}}{2 - \sqrt{3}} = -\sqrt{3} \Rightarrow \varphi + \theta = -\sqrt{3}$$

$$\sqrt{3} = \varphi + \frac{0}{3} \Rightarrow -\sqrt{3} = -\varphi + \frac{0}{3} = \varphi(-\frac{0}{3})$$

$$\Rightarrow \varphi + \theta = \varphi(-\frac{0}{3}) \Rightarrow \theta = k\pi + (-\frac{0}{3}) = k\pi - \frac{0}{3} \begin{cases} k=0 \Rightarrow \theta = -\frac{0}{3} \text{ рад} \\ k=1 \Rightarrow \theta = \frac{\pi}{3} \text{ рад} \\ k=2 \Rightarrow \dots \\ k=3 \Rightarrow \dots \end{cases} \text{найти наименьшее } \theta \text{ или } \theta_{\text{доп.}}$$



ΔΙΑΦΑΘ Θ & Θ'



$$\begin{cases} x_1 = A_1 + \varphi(\omega t + \theta) \\ x_2 = A_2 + \varphi(\omega t + \theta) \end{cases} \Delta \varphi = \varphi_2 - \varphi_1$$

$$\begin{cases} x = A + \varphi(\omega t + \theta) \\ A = \sqrt{A_1^2 + A_2^2 + 2A_1A_2 \cos \varphi} \end{cases}$$

$$\varphi + \theta = \frac{A_2 \cdot \varphi}{A_1 + A_2 \cos \varphi}$$

α βρέσω έλαση θ & θ' θα έχω από το ΔΙΑΓΡΑΜΜΑ ΤΩΝ ΠΛΗΘΩΝ

3) οι δύο γενικές μορφές των απεικονίσεων των $\varphi_1 = 0$ (απεικονίσεων των $\varphi_1 = 0$ ή $\varphi_2 = 0$)