

PROBLEM:

Define $x(t)$ as

$$x(t) = 33 \cos(\omega_0 t + 3\pi/4) + 22 \cos(\omega_0 t + 13\pi/4) + 55 \cos(\omega_0 t - \pi/4)$$

- Express $x(t)$ in the form $x(t) = A \cos(\omega_0 t + \phi)$ by finding the numerical values of A and ϕ .
- Plot all the phasors used to solve the problem in part (a) in the complex plane.