

PROBLEM:

Consider a signal $x(t)$ such that

$$x(t) = 2 \cos(\omega_1 t) \cos(\omega_2 t) = \cos[(\omega_2 + \omega_1)t] + \cos[(\omega_2 - \omega_1)t]$$

where $0 < \omega_1 < \omega_2$.

- Suppose that $\omega_1 = 25\pi$ and $\omega_2 = 60\pi$. Determine the (minimum) period of $x(t)$.
- Draw the spectrum for $x(t)$, using the parameters from part (a).