Answer on Question #51962, Physics, Other

Task: In the wave equation y=asin(ωt+kx) , the quantity (ωt+kx) represents. the symbols have the usual meaning

Answer:

$y(x;t)=a\sin(\omega t+kx)=a\sin(kx+2\pi ft)$

a = amplitude

$k = 2\pi/\lambda$ = wave number

λ = wavelength

f = frequency

$T = 1/f$ = period

$\omega = 2\pi f=2\pi/T$ angular frequency

(ωt+kx) =“phase”