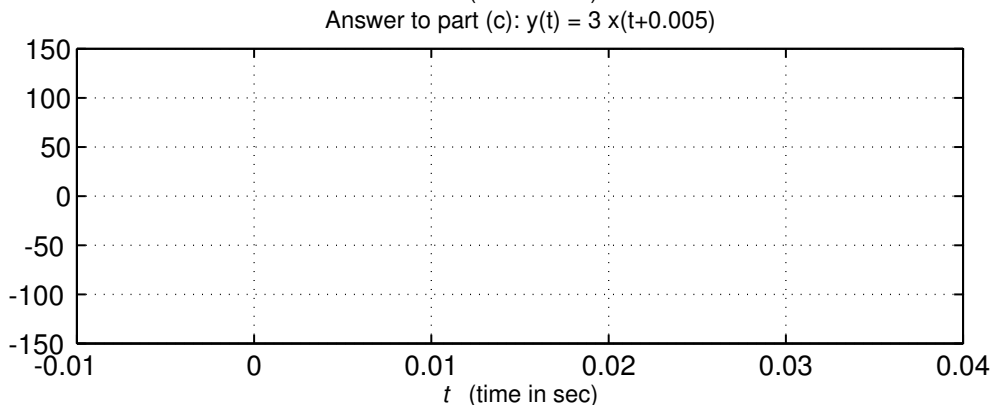
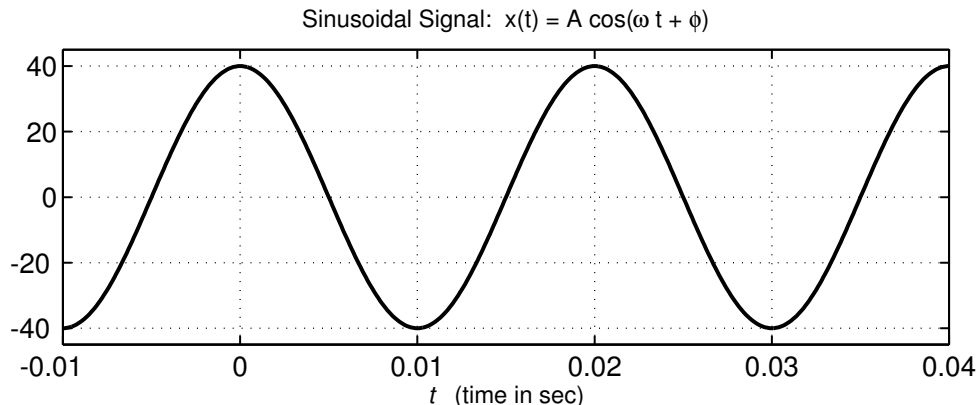


PROBLEM:

- (a) The above figure shows a plot of a sinusoidal wave $x(t)$. From the plot, determine the values of A , ω_0 , and $-\pi < \phi \leq \pi$ in the representation

$$x(t) = A \cos(\omega_0 t + \phi)$$

Where appropriate, be sure to indicate the units of the sinusoidal signal parameters.

- (b) The signal $x(t)$ in part (a) can be written as the real part of a complex exponential. Determine Z for the complex signal $z(t) = Ze^{j\omega_0 t}$ such that $x(t) = \Re\{z(t)\}$.
- (c) Sketch the signal $y(t) = 3x(t + 0.005)$, where $x(t)$ is the signal from part (a). Use the axes provided above or make your own axes covering the same time interval.