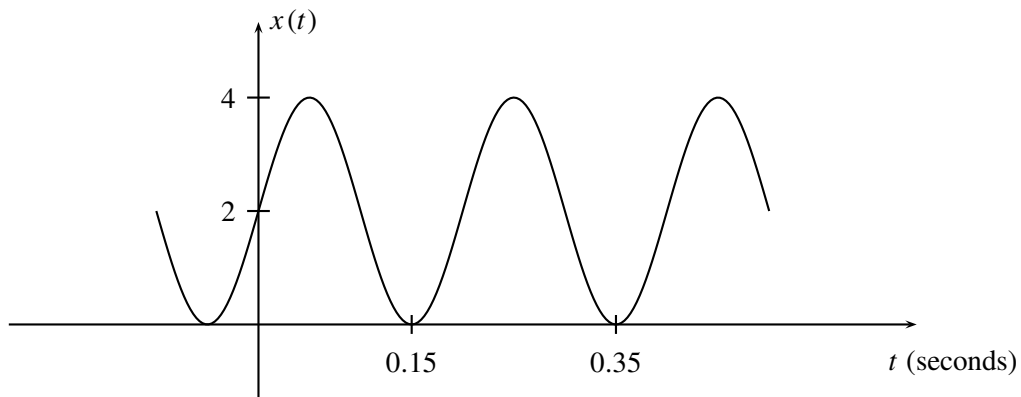
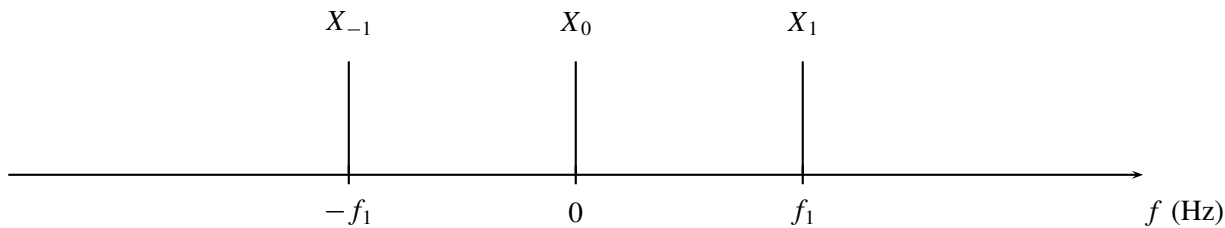


PROBLEM:

A signal $x(t) = A \cos(2\pi f_1 t + \phi)$ is shown in the figure below,



The spectrum of $x(t)$ has the form



Determine the values for f_1 , X_0 , X_1 , and X_{-1} . Note that the frequencies f are given in Hertz.

$$f_1 =$$

$$X_0 =$$

$$X_1 =$$

$$X_{-1} =$$