## **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.

$$f_1 =$$
 $X_0 =$ 
 $X_{-1} =$