

## PROBLEM:

The “spectrum” diagram gives the frequency content of a signal.

- (a) Draw a sketch of the spectrum of  $x(t)$  which is “sine-times-cosine”

$$x(t) = \cos(50\pi t) \sin(700\pi t)$$

Label the frequencies and complex amplitudes of each component.

- (b) Determine the minimum sampling rate that can be used to sample  $x(t)$  without any aliasing.