PROBLEM:

A signal x(t) has the two-sided spectrum representation shown below.



(a) Write an equation for x(t). Make sure to express x(t) as a real-valued signal.

(b) If the signal is sampled with a spacing of $T_s = 50$ millisec, sketch the "digital" spectrum of this signal. Indicate the complex phasor value at each frequency. Only the range $-\pi < \hat{\omega} \le \pi$ needs to be shown.