

**Exercise 6.123**

**L** Answer (b).

For  $x$ , the Nyquist rate is  $2(880) = 1760$  Hz. Since the sampling rate of 2000 Hz is greater than the Nyquist rate, no aliasing occurs and the original signal  $x$  is reproduced exactly on the loudspeaker (i.e., two tones at 440 Hz and 880 Hz).