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**EXERCISE 8.14:** Use `MATLAB` to synthesize the sampled signal  $x[m]$  in (8.52) with frequencies  $\hat{\omega}_0 = 0.211\pi$ ,  $\hat{\omega}_1 = 0.111\pi$ ,  $\hat{\omega}_2 = 0.8\pi$ , and  $\hat{\omega}_3 = 0.4\pi$ , and then use the D-to-A converter on your computer (`soundsc` in `MATLAB`) with  $f_s = 2000$  Hz to listen to  $x(t)$  in (8.51). During the listening observe the differences among the four segments of the signal. Is what you hear completely consistent with the specified signal parameters (duration, frequency, intensity) given above for (8.51)?

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