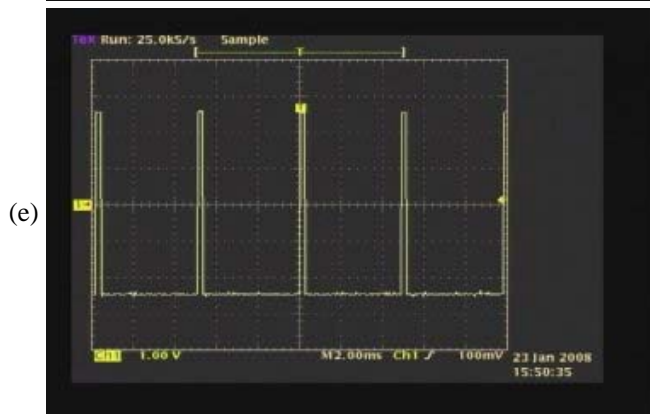
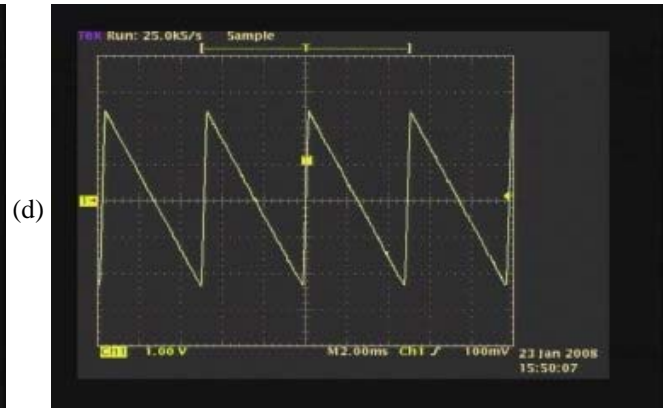
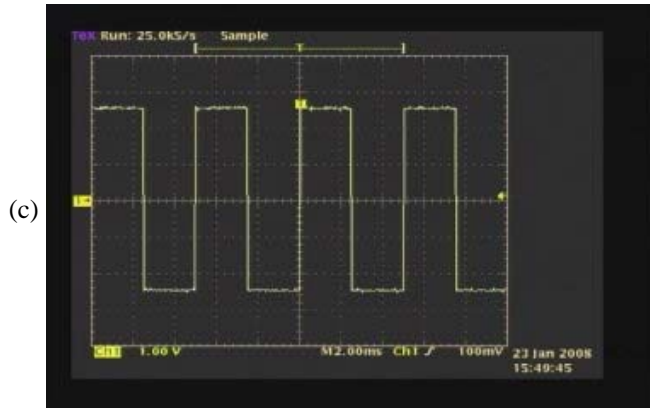
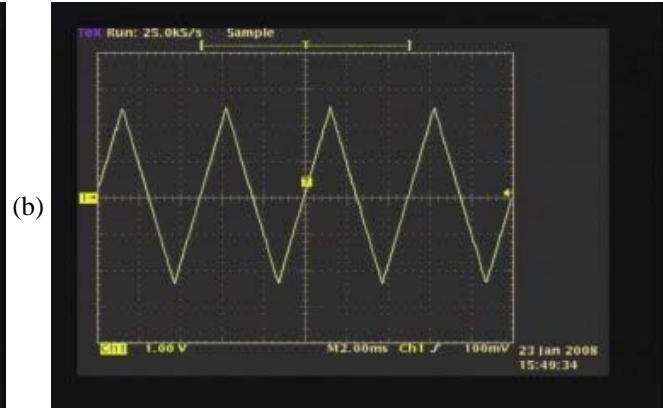
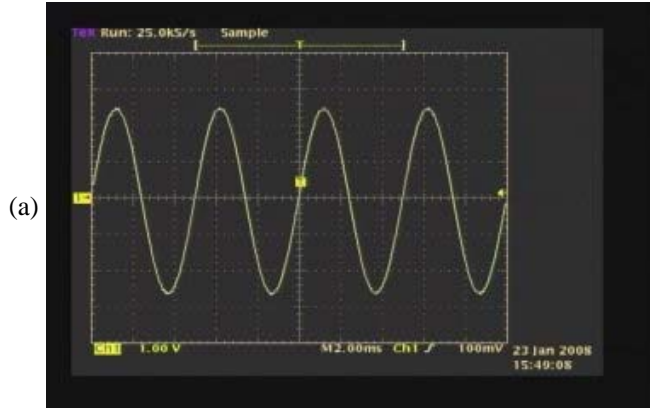


## Question #325

For this question we will consider the following electronic waves: sine wave, triangular wave, square wave, sawtooth wave, and pulse train wave.

Five wave shapes produced using an audio frequency generator are shown in in the figures below.



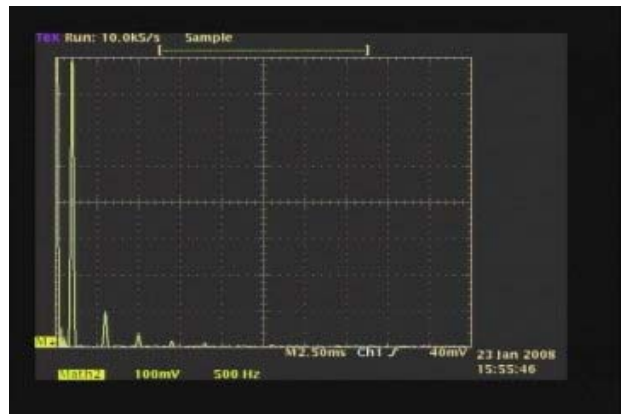
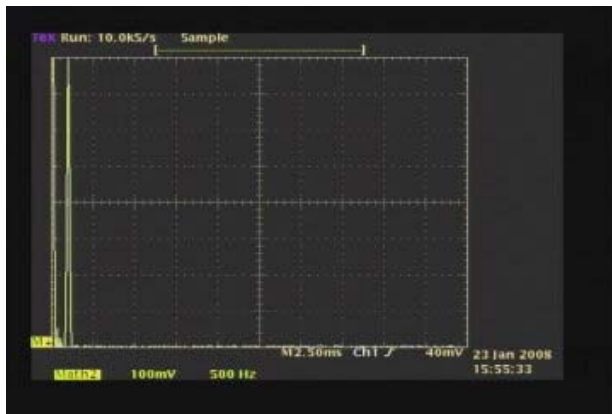
Five wave sound recordings are played at approximately the same pitch in the following five files formatted as .wav files:

[\(Sound a\)](#) [\(Sound b\)](#) [\(Sound c\)](#) [\(Sound d\)](#) [\(Sound e\)](#)

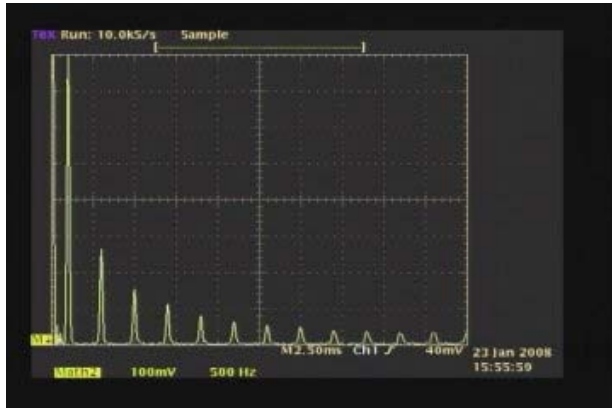
Five wave spectra are shown in the figures below:

(a)

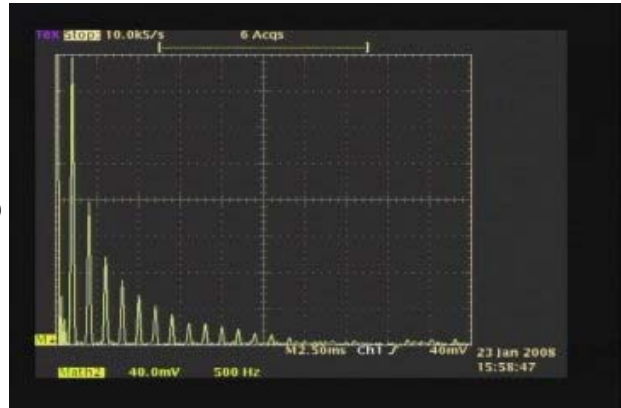
(b)



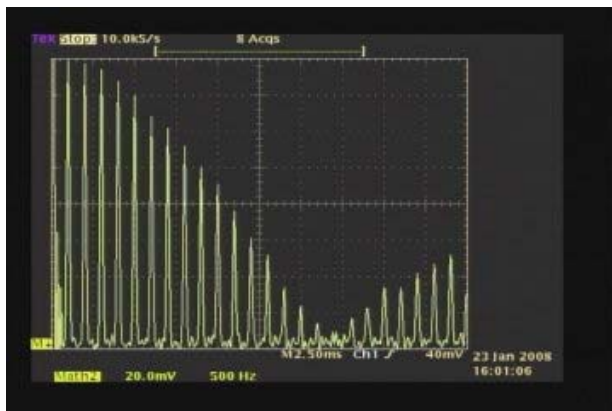
(c)



(d)



(e)



The problem this week is to match up the wave shapes, sounds, and spectra with the names of the waves given below.

Print the list of wave names below, and next to the names of the waves make a table with the second column identifying the wave shape (a through e), the third column identifying the sound (a through e), and the fourth column identifying the spectrum (a through e).

The first column in your table will be:

- sine wave.
- triangular wave.
- square wave.
- sawtooth wave.
- pulse train wave.

Click here for [Answer #325](#) after October 27, 2008.

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For questions and comments regarding the *Question of the Week* contact [Dr. Richard E. Berg](#) by e-mail or using phone number or regular mail address given on the [Lecture-Demonstration Home Page](#).