

Answer #327

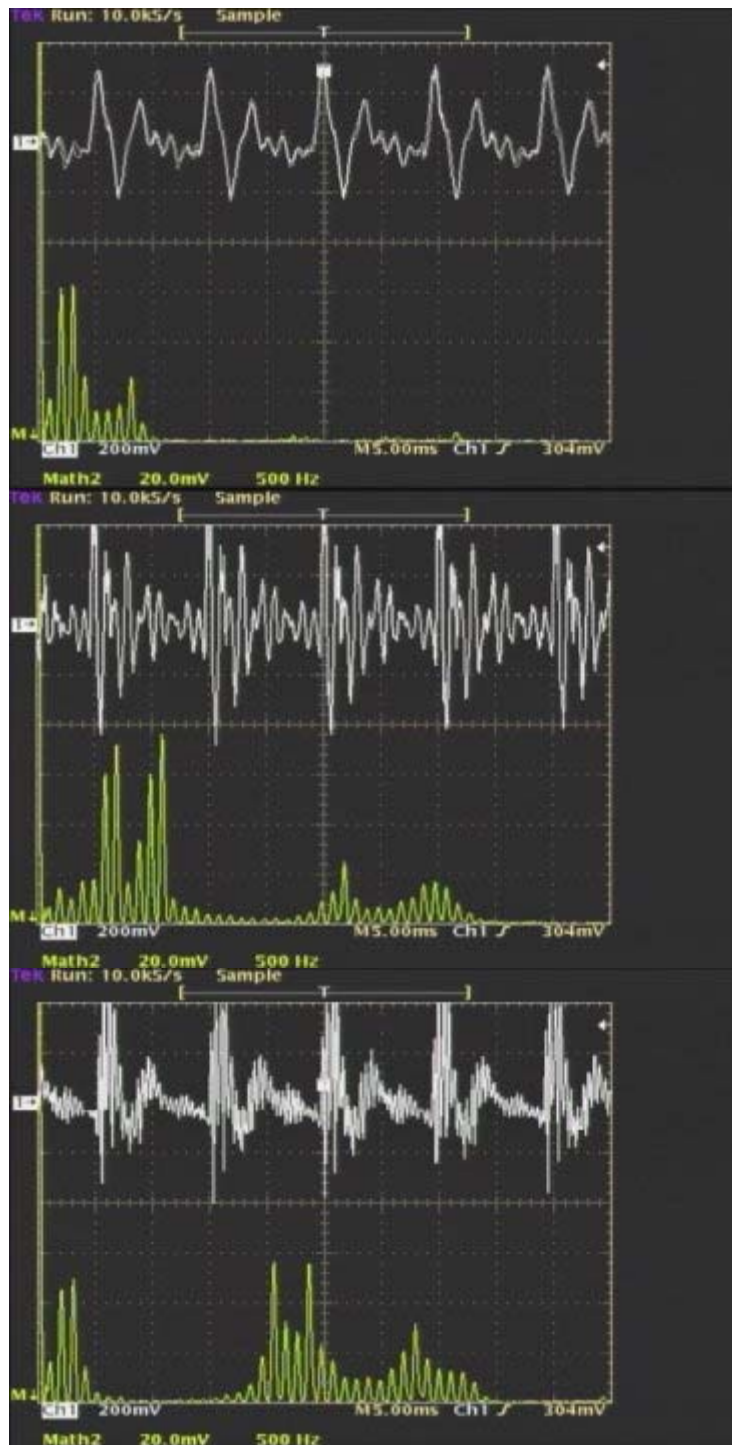
The answers:

"oo": Wave shape #3, Spectrum #3

"ah": Wave shape #2, Spectrum #1

"ee": Wave shape #1, Spectrum #2

can be heard and seen in an mpeg video by clicking your mouse on the any of the photographs below.



What are some hints that might lead one to the correct choices?

First, the "oo" sound is the most "simple," or least rich sound, suggesting that it might have the fewest harmonics, and those harmonics may be at relatively low frequencies.

Second, the difference between the "ah" and the "ee" sounds is that the "ee" sound is a more rich and nasal tone. The sound "ee" might therefore be richer in harmonics, and have a higher formant frequency.

The three sounds are characterized by their differing formant frequencies, which are indicated on the spectrum in the video.

[Demonstration H6-02: VOCAL FORMANTS](#) in our demonstration library expands on the analysis of vocal formants to include additional vowel sounds.

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