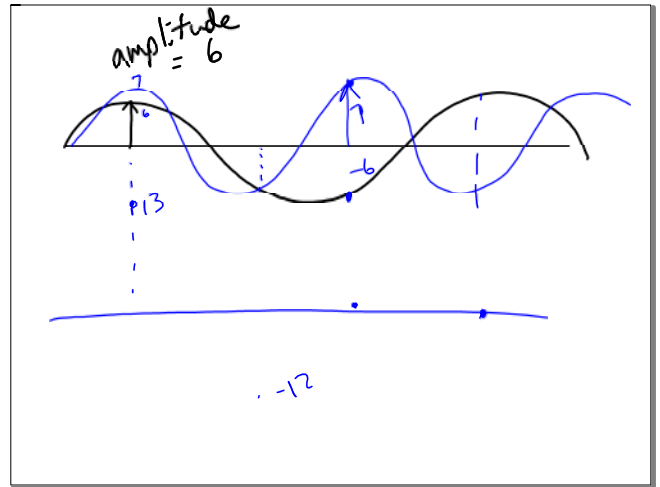


PS - Mar 15
 CLT s_s will describe
 Beats and Beat Frequency.
 Also Sonar and speed of
 sound in different materials.



Mar 15-8:22 AM

Mar 15-8:25 AM

<http://faraday.physics.utoronto.ca/PVB/Harrison/Flash/ClassMechanics/Beats/Beats.h>

Beat Frequency -
 How many times, per
 second, that a beat occurs.
 A beat is where the two
 sound waves cancel each other
 momentarily.
 destructive interference.

beat

Mar 15-8:27 AM

Example:

① what is the beat freq
 between a 300 Hz wave
 and a 303 Hz wave?
 3 Hz

② 300 Hz and a 297 Hz wave?
 3 Hz
 only the diff.

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Speed of sound

air	$343 \frac{m}{s}$
water	$1500 \frac{m}{s}$
steel	$5000 \frac{m}{s}$

Mar 15-8:43 AM

Sonar

Sound

Navigation

Finding your way

And

Ranging

Finding distance

Mar 15-8:53 AM