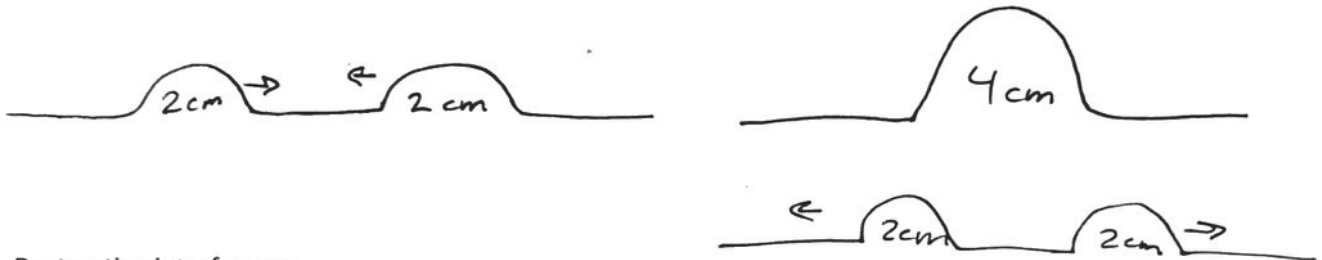


Warm up:

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1. Diffraction- When the waves spread out through a small opening.
2. The waves are coming from the opening itself- the waves are coming from the ocean.
3. This also happens with sound waves.

Constructive interference

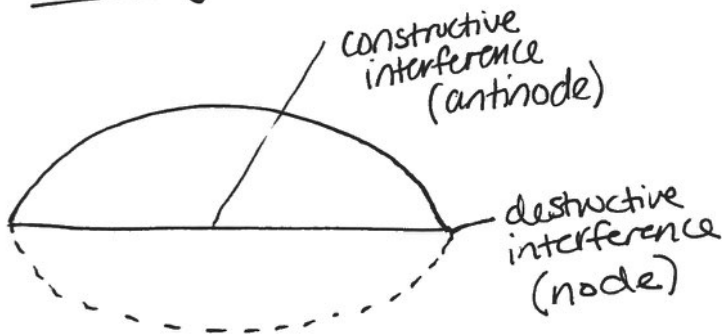


Destructive interference



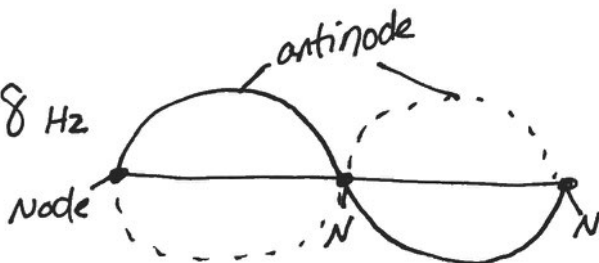
Standing waves

• 4 Hz



← fundamental harmonic
↳ 1st part of resonance
1st harmonic (overtone)

• 8 Hz



2nd harmonic (overtone)

1.2 Hz



3rd harmonic
(overtone)

To find the frequency at a certain harmonic, multiply the fundamental frequency by the harmonic (# of antinodes).

How did the boy break the glass with his voice?

- The frequency of his voice matched the fundamental harmonic of the glass.
- Constructive interference