

Review

i. Wave analysis

ii. Displacement /time

Feb 5-1:53 PM

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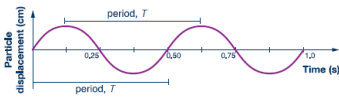
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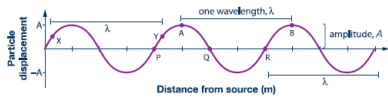
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1 cycle = Period



1 cycle = wavelength

Feb 5-1:56 PM

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1. Wavespeed
2. Wavelength
3. Frequency / Period

Feb 5-1:58 PM

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## Wave Interaction

Waves are energy.

Energy has no physical existence


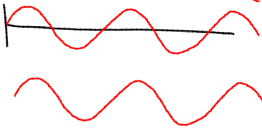
∴ Waves can pass through another wave w/o affecting it.

However, waves do affect matter. Each individual wave will still displace matter


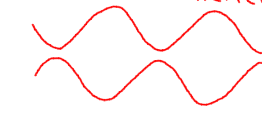
Feb 5-1:59 PM

Superposition

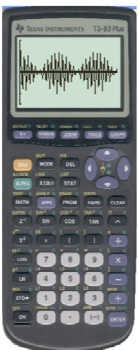
- constructive interference



- destructive interference



Feb 5-2:07 PM



Beat frequency

$$f_B = |(f_1 - f_2)|$$

Feb 5-2:21 PM