

Standing Waves

Standing waves are created when a wave reflects back on itself with the same frequency, wavelength and speed.

Key Point:

Characteristics of Standing Waves:

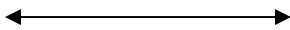
From the superposition principle, the destructive and constructive regions of interference can be predicted.

Points of completely destructive interference =

Points of completely constructive interference =

Standing Waves on a String: (fixed at both ends)

3rd Harmonic (3rd Vibrational Moment)



Distance between Nodes is:

Distance between Antinodes is:

Web sites:

<http://www.walter-fendt.de/ph14e/stwaverefl.htm>

http://webphysics.davidson.edu/Applets/Examples_From_Others/super1.htm