

READING ASSIGNMENT FOR APRIL 10

SECTIONS 16.1 AND 16.6

16.1 - The Principle of Superposition

- When *any* two waves mix together, we use the principle of superposition to determine what happens. (So this section on sound waves is useful for us. The idea behind mixing light waves is similar.)
- Superposition - When two waves or more waves are at the same location at the same time, the net result is given by the *vector* sum of the individual waves.
- Interference - The mixing of two or more waves. (Doesn't necessarily imply cancellation.)
- Constructive Interference results in an increase in intensity.
- Destructive Interference results in a decrease in intensity.

16.6 - The Interference of Waves from Two Sources

- Again, introducing something in the context of sound will be useful for light.
- The path difference between the waves determines whether we get constructive or destructive interference.

THE QUIZ IS AT: www.masteringphysics.com/site/login.html