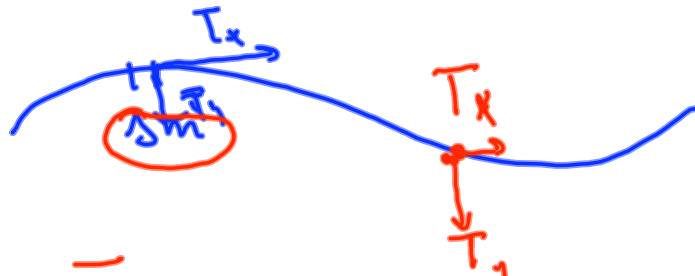


Reminders 1-22-08: NO MORE ADDS!!!

- First Webassign Homework due Thursday by 11:59PM.
- Log onto Computers!!!
- Get lab software from desktop of computers in lab.
- Sign prerequisite certificate form
- Login & Log out of Physics Tutoring Center or S-107 (lab)
- Finish Reading Chapters 13 & Start on Chapter 14
- Sign up for Physics 2Y. Homework will be discussed in this class, not (generally) during lecture.

Objectives:

- General Properties of Mechanical Waves: Wavelength, Frequency, and Wave Speed
- Behavior of Waves: Constructive and Destructive Interference, Reflection and Transmission of Waves
- Properties of Sound Waves
- Speed of Sound
- Energy and Intensity of Sound Waves



as T increases ↓

force on Δm increases.

This means $|\vec{a}|$ increases.

That means each point on string moves up & down faster

↳

If I make string thicker then Δm increases, $|\vec{a}|$ decreases, and wave speed decreases

- **Questions**

- Suppose we have two loudspeakers. Each loudspeaker emits a sound wave of the same frequency. What does the observer hear if both Speakers transmit a sound wave simultaneously? (constructive or destructive interference)
- Why are the highest pitched strings on most instruments the most likely to break?
- Consider a harmonic wave traveling on a string. Describe the motion of each point on the string.

• Questions

- Suppose three strings are tied together. The middle string has a higher mass/length than the outer two strings (their mass per unit lengths are equal). A pulse is sent from the left end to the right end. Describe what happens at the boundaries.

