

Physics 216 HW Ch 36 pt 1 due at the beginning of class 4/26/2017.

To receive full credit:

- **clearly show your reasoning** (including any necessary calculations),
- **indicate your final answer in an unambiguous way** (such as by circling or underlining it).
- **Round your answers appropriately**
 1. Discuss briefly any possible difference between measuring the time at which two different events occur in your reference frame and the time you see (with your eyes, say) the events occurring.
 2. A famous measurement of the speed of light was made using the timing of the eclipses of some of Jupiter's moons. When Jupiter is on the same side of the sun as we are, you make observations determining the period of orbit of some moons around Jupiter. Since orbits are periodic, this should let you predict the positions of the moons in the future and predict eclipses at any date. Later in the year, when Jupiter is nearly on the other side of the sun from the earth you find your eclipse predictions are not working. Explain qualitatively why this is and by roughly how much your predictions are off. Relevant astronomical data can be found inside the back cover of your textbook.