PHYS 1301 IDEAS OF MODERN PHYSICS HOMEWORK C

Name_____

Print out and use this as a cover sheet for your hand-written answers.

1. According to Special Relativity, observers in motion relative to one another will get different results when measuring time, length and simultaneity. Why do you not notice this in your everyday experience?
   [3.1 Space, Time, Motion, Revisited]

2. Using the postulates of Special Relativity, explain why a uniformly moving light-clock ticks more slowly than a stationary light-clock according to an observer at rest.
   [3.1 Space, Time, Motion, Revisited]

3. State the twin paradox and explain why it is not actually a paradox of Special Relativity.
   [3.2 Paradoxes (Not)]