

Homework Set 5

Due Monday, October 1

- I. At 12 midnight you put a 60° beer in a 40° refrigerator. You get up at 8 a.m. expecting to have a cold one with your Honey Puffs cereal but to your horror you find that someone has taken your beer and left it on the table. The beer is now 65° . (Room temperature, you note, is 70° .)

You know roommate #1 left for work at 6 a.m. and so go to confront roommate #2. But, he swears that he has been asleep the whole time. You bet him a six pack you can prove it was he who left the beer out. He folds his arms, smiles and says “you’re on!”

First you put the beer back in the frig for 30 minutes. When you take it out it has cooled to 50° .

Problem: Prove the beer was taken out at 7:37 a.m. Show all work.

- II. Do these problems. I know that the answer is in the back of the book. Do them yourself anyway!

3.1: 1, 4, 8, 9, 10, 12, 30, 34, 40

3.5: 2, 6, 11, 18