

Due date: Thursday, March 13

Deadline: Tuesday, March 25

B means a problem in Blundell & Blundell's text; GT means a problem in Gould & Tobochnik.

1. B 13.7
2. B 14.1 Note that tea is mostly water. In addition to the entropy change of the tea, find ΔS for the surroundings and for the "Universe."
3. B 14.5 Make clear which contribution to ΔS_{total} is from the lead block and which from the bath[s]. You do not need to do the proof that ΔS_{total} is zero for an infinite number of intermediate baths, but do observe the trend.
4. B 14.7