

Due date: Tuesday, March 3

Deadline: Thursday, March 5

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

0. B Revisit the posted list of corrections to Blundell & Blundell and update your text with the new entries, highlighted in yellow. Note the 3 posted articles on the Solutions page about entropy (and the one about Clausius's theorem, if you need formal convincing).
1. 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."
2. B 14.4
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 enough to observe the trend convincingly. Note the analogy with the situation discussed in Fig. 2.6 and the accompanying text in the Baierlein posting.
4. B 14.7
5. B 14.8