

Ph 136: Statistical Mechanics – Homework

Read the text and try to work again through the monatomic gas calculations we went through in class.

1. If you have forgotten (or never knew) classical mechanics, work through Ex. 3.1 on Canonical Transformations. If you get stuck, consult a standard text like Goldstein. Otherwise do the estimates Ex. 3.3
2. Ex. 3.2 This should be fairly straightforward if you follow the instructions
3. Ex. 3.4 If you can't do this in a few lines, stop and think!
4. If you have not seen this before do Ex. 3.7; otherwise attempt Ex. 3.5