

Problem Set 7
(due Wednesday, March 10)

1. Problem 6.3, page 225. I suggest using Mathematica for the graph.
2. Problem 6.4, page 225. “Estimate” in this case means try to get an answer that’s accurate to within 10% or so.
3. Problem 6.6, page 227. Here the word “estimate” is simply an acknowledgment that a small uncertainty in the temperature might create a large uncertainty in the answer.
4. Problem 6.12, page 228. Be sure to read the rest of the problems on this page to get an idea of the range of possible applications.
5. Problem 6.15, page 231.
6. Problem 6.16, page 231. The formula that you’ll derive in this problem will be used repeatedly in the text, so I want you to become reasonably comfortable with it.
7. Problem 6.20, page 233. For part (e), you needn’t check the limits (since you presumably did this in Problem 3.25), but please do compute the heat capacity and plot it as a function of T using Mathematica.
8. Problem 6.23, page 236.
9. Problem 6.28, page 237. Please use Mathematica for this problem; refer to the separate handout for examples.
10. Problem 6.31, page 240.

Textbook Comments

Problem Set 8

With respect to the portion of your textbook that was covered by this problem set, including the problems themselves ...

Describe at least one thing that you liked about the book. Please be as specific as you can.

Describe at least one thing that you disliked about the book, or one way in which the book could be improved. Please be as specific as you can.