# Thermodynamics Homework Six 

## Due Friday Mary 5, 2016

1. Problem 1.50
2. Problem 1.51
3. Problem 4.2
4. Problem 4.3
5. Problem 4.6. This is a challenging, multi-step problem. Do the best with it that you can.
6. Problem 4.8
7. Problem 4.13. The last part of the problem asks for a numerical example. Here is one way to put numbers to this problem. Suppose that you want the temperature inside your house to be 25 . When it is 30 degrees outside, your air conditioner costs $\$ 1 / \mathrm{hr}$ to run. If it was 35 outside and you wanted to it be 25 inside, how much would your air conditioner cost you per hour?
