

Homework 3, due Oct. 12, 2006

1. Problem 5.6 in book. Answer is in back, so show work.
2. Problem 5.14 in book. Show work. Also, show that the expression for  $\eta$  can be written as  $\eta = 1 - (T_a/T_b)$  (using the labels as in Fig. 5.11 in the book of what states  $a$  and  $b$  are).
3. Problem 5.15 in book.
4. Problem 6.3 in book.
5. Problem 6.4 in book.
6. Problem 6.6 in book.
7. Problem 6.13 in book.