Math 117 / SyDe 111 Assignment *9 Fall 2006

due December 1st

MEM, p. 550 *79 dfi (the text's answer to (i) has two errors in it)
*80 gh

p. 558 *84 d, 94 b

p. 569 *100

p. 580 *21 o

Problem I. Find the area between the line $y = x - 1$ and the parabola $y^2 = 2x + 6$. Note that we can use either x or y as the variable of integration for this; set up both integral expressions, and evaluate one of them.

Suggested Problems: MEM p.550 *79 (the rest)
*80 a, 81, 82
p.569 *102
p.580 *1, 2, 5 (2t is a good challenge)

- Find the area between $y = x$ and $y = \sqrt[3]{x}$ (for $x \geq 0$) (Ans: $\frac{1}{4}$)
- Find the area below $y = \ln x$, between $x = 1$ and $x = e$, (Ans: 1) by integrating on y instead of x.