Math 106 Section B
HW 2

Show all your work to receive full credit for a problem. Do not use the table of integrals.

I. Do the following problems from the textbook:

- Section 7.1 (Page 297) 30, 36, 56, 64
- Section 7.2 (Pages 303-304) 10, 30, 52

II. Evaluate the following integrals exactly:

(a) $\int x^2 \ln x \, dx$

(b) $\int \frac{(\ln x)^2}{x} \, dx$

(c) $\int (z-1) e^{3z} \, dz$

(d) $\int t\sqrt{t+7} \, dt$

(e) $\int \frac{y-2}{y^2 - 4y + 11} \, dy$

(f) $\int x \, e^{x^2} \, dx$

(g) $\int x^3 \, e^{x^2} \, dx$

Practice Problems: Not to be handed in

- Section 7.1 (Page 297) 29, 31, 35, 51, 57
- Section 7.2 (Page 303) 3, 7, 9, 13, 17, 19, 21, 29, 31, 33, 37