Math 251: Problem Set 13

Due: December 9, 2008

This is a pledged set. Therefore, no outside help from book, calculator, or other people.

1. Evaluate
$$\int p^5 \ln p \, dp$$

2. Evaluate
$$\int \cos x \, \ln(\sin x) \, dx$$

3. Evaluate
$$\int_0^1 \frac{\ln y}{\sqrt{y}} \, dy$$

4. Evaluate
$$\int \frac{1}{(t+4)(t+1)} \, dt$$

5. Evaluate
$$\int \frac{r^2}{r+4} \, dr$$