Math 181 Recitation 10/18

Due at recitation, Thurs, Oct. 18, 2007

The first problem addresses the generally poor response to the substitution questions on the midterm exams. Keep in mind that an integral $\int f(x)dx$ transforms under the change of variable u = g(x) by the substitution of $g^{-1}(u)$ for x in f(x) AND of du/(du/dx) for dx:

$$\int_{a}^{b} f(x)dx = \int_{g(a)}^{g(b)} f\left(g^{-1}(u)\right) \frac{du}{(du/dx)}.$$

- **1.** p. 544, **#96** (all parts).
- 2. p. 553, #38.
- **3.** p. 554, **#4**8.
- 4. p. 554, #50.