MATH 1A
QUIZ 11

Instructions: Please simplify your answers as much as possible, and box or circle your final answer. Remember, answers without justification will not receive full credit. You have 15 minutes. Good luck!

1. $f(x) = \sec x \tan x$, $-\frac{\pi}{4} \leq x \leq \frac{\pi}{4}$.
a) Find an expression for the area under the graph of f as a limit of Riemann sums. (The Riemann sum should be as explicit as possible.)
b) Find the area under the graph of f.

2. Find $\int_0^3 |t^2 - 4| \, dt$.

3. Find

$$\int \frac{1}{x(\ln x)^6} \, dx.$$