MAT 142
Quiz #1

February 3, 2005

Intructions: You have 15 minuntes for this quiz. You may not use any books, notes, or calculators. Justify every statement that you make. If you wish to use a theorem proved in class, state the theorem precisely. Good luck.

1. Prove that $\int \sec x \, dx = \ln|\sec x + \tan x| + C$.

2. Let $f(x)$ be any integrable function. Find a value of c so that

$$\int_a^b f(x)\, dx = \int_a^b f(c - x)\, dx$$