

PRINT Your Name: _____

Quiz 2 — August 26, 2011 – Section 8 – 11:15 – 12:05

Remove everything from your desk except a pencil or pen.

Circle your answer. **Show your work.** Your work should be correct and coherent. **CHECK** your answer.

The quiz is worth 5 points.

Find $\int \sec^2 x \tan x dx$.

Answer: Let $u = \tan x$. Then $du = \sec^2 x dx$. The integral is equal to

$$\int u du = u^2/2 + C = \boxed{\frac{\tan^2 x}{2} + C}.$$

Check: The derivative of the proposed answer is

$$\tan x \sec^2 x \checkmark$$