Quiz 9

Your name:

Your TA's name:

No calculators, no notes, no books. Show all your work (no work = no credit). Write neatly. Simplify your answers.

1. [5 points] Find $g'(x)$ if $g(x) = \displaystyle\int_{x^2}^{3} \frac{\sqrt{\sin t}}{t + \cos t}\, dt$.

2. [5 points] Evaluate the definite integral $\displaystyle\int_0^1 \frac{x}{e^{2x}}\, dx$.

bonus problem [5 points extra] Evaluate the integral $\displaystyle\int \tan^3 x \sec^4 x\, dx$