NAME ____________________________________________

Instructions. This quiz will be graded for accuracy, out of 10 points. Make sure to show all your work for full credit. On the actual quiz, the problems may appear in any possible order.

Time: 10 minutes

1. Given \( g(x) = \int_a^{q(x)} f(t)dt \), use the Fundamental Theorem of Calculus Part 1 to find \( g'(x) \). The bounds on the integral may be \( \int_a^x \), may be reversed as \( \int_{q(x)}^a \), or may be 2 functions as \( \int_{r(x)}^{q(x)} \)

* Find examples in Lecture 18/19, Worksheet 20, and HW 16

2. Evaluate the integral using the substitution method. This may be a definite or indefinite integral, and may require using the “u= ..” equation twice in the substitution.

* Find examples in Lecture 19/20, Worksheet 21, HW 17.