Math 132
Quiz 1 – January 31, 2012

Name _____

1. (3 points) Use substitution to evaluate the following indefinite integral:

$$\int x \cdot \sin x^2 \, dx$$

2. (2 points) Determine the Riemann sum associated with $\int_0^3 \sin x^2 \, dx$. Use a uniform partition, and right endpoints.

3. Consider $\int (\_\_\_\_)(x^{43} + x^2 - 1)^{56} \, dx$.

   (a) (1 point) Fill in the blank with a nonzero function so that you can integrate by substitution.

   (b) (4 points) Evaluate the resulting integral.