

MATH 211- Quiz 5 - Fall 2001- NAME:

Show work to receive credit.

- 1.(3pts) Evaluate the Riemann sum for $f(x) = 1 - x^2$, $0 \leq x \leq 2$, with five subintervals, taking the sample points to be left endpoints.
- 2.(2pts) Find the derivative of $g(x) = \int_0^{x^2} \sin t dt$.
- 3.(5pts) Evaluate the following integrals.
 - a. $\int_1^2 \frac{1}{x^4} dx$
 - b. $\int x(x^2 + 1)^5 dx$
 - c. $\int \frac{\tan^{-1} x}{1+x^2} dx$