

Math 182

Quiz 7

Name: _____

February 21, 2003

Show all work for credit.

Leave all answers as exact answers unless otherwise stated.

1. Does $\int_1^{\infty} \frac{\sin^4(x) dx}{x^{3/2}}$ converge? Justify your answer.

2. Find the arc-length of $f(x) = (x - \frac{4}{9})^{3/2}$ for $3 \leq x \leq 9$.