

MATH141(0332) Calculus II

Quiz 2, Thursday, September 11, 2008

Name: _____

Show all work clearly and in order, and circle your final answers. Justify your answers algebraically whenever possible. Calculator is not allowed in this quiz. You have 15 minutes to take this 12 point quiz. You can earn at most 10 points in this quiz. The extra points will not count.

1. (6 points) Find the length L of the graph of the following function on the given interval.

$$f(x) = \frac{e^x + e^{-x}}{2}, 0 \leq x \leq \ln 10.$$

2. (6 points) Find the surface generated by revolving about the y -axis the graph of the following function on the given interval.

$$f(x) = x^2, 1 \leq x \leq 2$$

NOTICE: This time, we do not revolving the graph about x -axis. Please be careful.