KFUPM Term 111 Date: 30/10/2011 Mathematics & Statistics MATH 102 Duration: 30 minutes

Quiz#2

Name: ID #: Section 1 Serial #:

1. Let R be the region enclosed by the graph of $x = e^y$, the line x = 3, and the x-axis. Find, using cylindrical shells method, the volume of the solid generated by revolving R about the line x = 4.

2. Find $\int \sqrt{1+\sqrt{x}} dx$. (Hint: Integrate it by parts).

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Quiz# 2

Name: ID #: Section 4 Serial #:

1. Let R be the region enclosed by the graph of $y = \ln x$, the line x = 3, and the x-axis. Find, <u>using cylindrical shells method</u>, the volume of the solid generated by revolving R about the line y = -1.

2. Find $\int \frac{dx}{\sqrt[6]{x} + \sqrt{x}}$. (Hint: Change the denominator to $x + x^3$).