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).

1. Let R be the region enclosed by the graph of $y = \ln x$, 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 $y = -1$.

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