Math 102		Name:
Quiz#3	10	Serial No.:

- 1. Find the volume of the solid if the region enclosed by the graph of $y = e^x$, the *x*-axis, x = 1, x = 5 is revolved about: (Just set up the integral formula)
 - a. the y –axis.
 - b. the line y = -4.

2. Find the volume of the solid if the region enclosed by the graph of $y = \sin x$ and $y = \cos x$, from $x = \frac{\pi}{2}$, to $x = \frac{3\pi}{2}$ is revolved about the axis $x = 2\pi$. (Just set up the integral formula)

3. Find the length of the curve $x = \int_0^y \sqrt{\sec^4 t - 1} dt$ when $-\frac{\pi}{4} \le y \le \frac{\pi}{4}$.

4. Find the area of the surface generated when the curve $y = \sqrt{x+1}$ is revolved about the x-axis when $1 \le x \le 5$.