

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

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