

Family name:

Sr. #

Q1) Evaluate

i. $\int_{-1}^1 x^2 \sqrt{x^3 + 1} dx$

ii. $\int \cot x dx$

Q2)

i. Sketch the region enclosed by $y = e^{-x}$, $y = 1$ and $x = 2$,

ii. Set up, but **Don't Evaluate**, an integral for the volume of the solid obtained by rotating this region about $x = 3$.

