

Name _____

1. (5 points) On the interval $[1, 3]$, the region R is bounded below by the x -axis and above by the graph of $y = \frac{1}{x^2 + 1}$. Revolve R around the y -axis and compute the resulting volume.

2. (5 points) What definite integral represents the length of the curve $f(x) = \ln x$ on the interval $[1, 5]$? You do not need to evaluate this integral.