1. Let $f(x):=\frac{1}{x}$. Then estimate give an upper bound on $\int_{1}^{3} f(x) d x$ by splitting the interval $[1,3]$ into four equal length subintervals and computing the upper sum.

Upper bound $=$
2. Compute $\int_{1}^{3} f(x) d x$ using your calculator.

$$
\int_{1}^{3} f(x) d x=
$$

