Vocabulary/Definitions

 $\circ~$ Definition/meaning of Δt

 $\circ~$ Sigma notation: meaning of $\sum_{i=1}^n f(t_i) \Delta t$

- \circ Definite integral
- $\circ\,$ Riemann sum
- \circ Integrand
- $\circ~$ Limits of integration
- $\circ~$ Definite integrals and areas
- $\circ~$ General Riemann sum

- **Understand 1.** Estimate $\int_{1}^{3} \ln(x) dx$ using a left-hand sum with n = 4.
- 2. Consider $\int_0^2 3x \, dx$ as an area and use that interpretation to find the value of the integral.