

Example 1. Suppose that $v(t) = \frac{\sqrt{t}}{16}$ is velocity in miles per minute (this is the function used to make Example 2 (Section 5.1)).

- (a) Estimate the distance travelled from 0 to 60 using a Left Hand Riemann Sum with $\Delta t = 5$.
- (b) Write a definite integral that equals the exact distance travelled and then use your calculator to calculate this integral.

- Example 2.** (a) Approximate $\int_1^3 \ln(x) dx$ using a right hand Riemann Sum with $n = 6$.
- (b) Represent your answer on a graph.
- (c) Use your calculator to find a more accurate numerical approximation.