NAME:

Show ALL your work CAREFULLY.

The graph shown below is that of the velocity \( v(t) \) of an object (in meters/second) traveling along a straight line.

(a) Using 5 subintervals, find the Right Hand Sum for the total distance traveled from \( t = 0 \) to \( t = 5 \) seconds.
(b) What is the average velocity of this object during $t = 0$ and $t = 5$? [First, you must find the exact value of the total distance traveled.]

(c) Find the exact value of

$$\int_{2}^{5} v(t) \, dt.$$