Math 4 Honors Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lesson 8-3: *The Definite Integral* Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Learning Goals:**

* *I can find and interpret the meaning of the definite integral of a function f(x) over an interval [a, b].*
* *I can find approximate and exact values of definite integrals.*

****





 OVER 🡪

 Page 2

**\*\*\*Very important! Please read this carefully**!\*\*\*







1. Evaluate the definite integral and explain what

the results tell about the walker’s distance

from the motion detector.

b. What is the total area between the graph of *v*(*t*) and the *t-*axis and what information about the walker’s trip is given by that number?

 Page 3







 OVER 🡪

 Page 4





6. Our calculators have multiple ways of calculating an integral. Here’s one way:



 \*\*\*Check your answers to parts a, b, and c from #5 to see how accurate your estimates are.

 Page 5

**HOMEWORK: Lesson 8-3**

****

****



 OVER 🡪

 Page 6



****

****

****