REVIEW FOR QUIZ 5

WEEK 5

The quiz will be available on the shelf outside my office (Rm. 330), starting at 5 pm Friday. When you are ready to take the quiz, pick up a copy and go directly to Collier Science Library and do the quiz. You will have 20 minutes. You may use a calculator. You may not use any books or notes. Return the quiz to my office when you are done. The quiz is due by 4pm on Monday.

Topics Covered:

Proof that a continuous function that on a compact set is integrable.

Fundamental Theorem of Calculus;

a. The derivative of an integral of a function equals the function: \( \frac{d}{dx} \int_{a}^{x} f(t) \, dt = f(x). \)

b. The integral of the derivative of a function equals the function:
\( \int_{a}^{b} f'(x) \, dx = f(b) - f(a). \)

Mathematica: plotting a function, Riemann sum.