REVIEW FOR QUIZ 4

WEEK 4

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:

Uniform Continuity. Key Theorem: A continuous function on a compact set is uniformly continuous. Give examples of functions that are not uniformly continuous on certain domains.

Integration. Riemann Sum to approximate \( \int_a^b f(x) \, dx \). Definition of the (Riemann) integral of a function in terms of the limits of Riemann sums as the width of the partition goes to zero.

Theorem: A continuous function on a closed bounded interval is integrable.

Give an example of a non-integrable function.