

1035-W1-1165 **Paul S Rossi*** (prossi@cse.edu), Morristown, NJ 07960. *Introducing Computation and Numerical Examples in Real Analysis Courses.*

An introductory course in real analysis is considered to be among the most difficult courses offered in the undergraduate mathematics curriculum. There may exist a number of reasons for this, but perhaps the one most often cited by students is that "there are no numbers!" Due to its nature, a first course in mathematical analysis presents students with a large disparity between theoretical and computational mathematics. In an attempt to help ease this gap, instructors can introduce more computation by providing students with numerical examples. In this paper we offer ideas on how to provide such examples. For instance, we present interactive Maple programs that make use of actual numbers to help students better understand certain topics. Among these topics we present limits of sequences as well as the familiar "epsilon-delta" definition. This definition is discussed in the context of uniform continuity - a customary topic that is often misunderstood by undergraduates. (Received September 18, 2007)