

1116-T5-2355 **Thomas Drucker*** (druckert@uww.edu), Department of Mathematics, University of Wisconsin,
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Analysis*. Preliminary report.

Most of the courses a student will have taken up to an introduction to analysis will not address in any depth the question of what sort of objects the numbers are which appear in calculations. By the time students have finished an introduction to analysis, one would like them to be mildly familiar with what numbers are. Of course, that can be accomplished by presenting them with an axiomatization of, say, a real closed field. It makes more sense to look at what kinds of properties one needs in order to be able to prove familiar results. By this stage in a student's career, there should be no danger of the student's believing that axioms were handed down from a mathematical Mount Sinai. Instead, it is both more appropriate and exciting for the student to see how much has to be built into an axiom system in order for a user to be able to prove what is needed. (Received September 22, 2015)