

1116-S5-1340 **Robert Kantrowitz*** (rkantrow@hamilton.edu), Hamilton College, 198 College Hill Rd., Clinton, NY 13323, and **Michael M. Neumann** (neumann@math.msstate.edu), Department of Mathematics and Statistics, Mississippi State, MS 39762. *Further variations on the theme of completeness*. Preliminary report.

The condition that all sequences of bounded variation in an ordered field are convergent is equivalent to the Dedekind completeness of the field. This criterion allows for short proofs for other expressions of completeness and facilitates the inclusion of a few more reformulations featuring the series tests of Dirichlet, Dedekind, and Abel. In particular, for any ordered field, it turns out that the validity of any of these three tests in conjunction with the geometric series test characterizes Dedekind completeness. (Received September 18, 2015)