1016-33-63 Bruce C. Berndt\* (berndt@math.uiuc.edu), Dept. of Mathematics, University of Illinois, 1409 W. Green St., Urbana, IL 61801. Two Entries on Bilateral Hypergeometric Series in Ramanujan's Lost Notebook.

On page 200 of his lost notebook, Ramanujan offers two results on certain bilateral hypergeometric series. The first can be derived from a result of Dougall on certain well poised bilateral hypergeometric series. The second is surprising and considerably more difficult to prove. Proofs of both results will be sketched. These proofs constitute joint work with Wenchang Chu. (Received January 25, 2006)