ABSTRACT

The abstract should be in the form of a brief and concise statement of the main results or points of view of the paper, without demonstrations and with a minimum of formulae. It should not exceed 100 words and should be compressed if possible into a single paragraph. It should be written in the third person. The abstract should be typewritten and in a form suitable for immediate publication in the MONTHLY.

Title: "Generalized Derivatives and Integrals"

This research was done while at the Illinois Institute of Technology in Chicago, Illinois, during the summer of 1965 as a participant in an NSF Research Participation Program for College Mathematics Teachers. Definitions of a generalized derivative have been given in the following three papers:


G. Pick, the Monthly, October, 1957, pp. 71-78. It is shown that the given definitions are equivalent. A definition is given for a generalized integral (using Fall's notation). Various analogs of integration theorems from complex analysis are then explored.