

1014-28-1384

Ron E. Rietz, Gustavus Adolphus College, 800 West College Avenue, St. Peter, MN 56082, and
Trevor J. Potter* (tpotter@gac.edu), Gustavus Adolphus College, 800 West College Avenue,
St. Peter, MN 56082. *Subspaces of finitely additive measures on N* . Preliminary report.

A measure on N , the set of natural numbers, is a function which assigns a real number to each subset of N and has the property that the measure of the union of a collection of pairwise disjoint subsets of N equals the sum of their individual measures. We consider finitely additive measures, a type of measure which has the above property only for finite collections of pairwise disjoint sets. We show that l_∞^* , the space of all finitely additive measures on N , can be written as the direct sum of ultrafilter measures and full-valued measures. In addition, within the subspace of full-valued measures, we can find nested isometrically isomorphic copies of l_∞^* . (Received September 28, 2005)