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**Michael C Axtell\***, Wabash College, Department of Mathematics, P.O. Box 352, Crawfordsville, IN 47933. *Some Remarks on U-factorizations.*

We call a factorization  $r = a_1 a_2 \cdots a_n b_1 b_2 \cdots b_m$  a U-factorization if  $r = a_1 a_2 \cdots a_n [b_1 b_2 \cdots b_m]$  where (1)  $a_i(b_1 b_2 \cdots b_m) = (b_1 b_2 \cdots b_m)$  for  $1 \leq i \leq n$  and, (2)  $b_j(b_1 \cdots \widehat{b_j} \cdots b_m) \neq (b_1 b_2 \cdots \widehat{b_j} \cdots b_m)$  for  $1 \leq j \leq m$ . A ring is called atomic if every nonzero nonunit can be written as a product of irreducible elements. A ring is called U-atomic if every nonzero nonunit has a U-factorization in which all the  $b_i$ 's are irreducible. We will focus this talk on work done this year in trying to determine the equivalence of atomic and U-atomic. Other finiteness properties will be examined as time permits. (Received June 23, 2000)