## 1056-05-910

Tricia Muldoon Brown\* (tricia.muldoon.brown@gmail.com), Department of Mathematics, Armstrong Atlantic State University, 11935 Abercorn Street, Savannah, GA 31419, and Margaret Readdy (readdy@ms.uky.edu), Department of Mathematics, 714 Patterson Office Tower, University of Kentucky, Lexington, KY 40506. *The Rees Product with a Poset or its Dual Poset.* 

The Rees product is a poset product defined by Björner and Welker to model a particular case of the commutative algebra version of the Rees algebra. As an example we consider the Rees product of the cubical lattice with a chain. We observe that the Möbius values of this poset are equal to the Möbius values of the Rees product of the dual of the cubical lattice with a chain. We prove that this is true in general for graded posets, and further we show that the Möbius function of the Rees product of a graded poset with the t-ary tree and the Rees product of its dual with the t-ary tree also coincide. (Received September 18, 2009)