## 1014-05-373 Vidya Venkateswaran\* (vidyav@stanford.edu). A New Class of Multiset Wilf Equivalent Pairs.

We say the pair of patterns  $(\sigma, \tau)$  is Multiset Wilf Equivalent if, for any multiset M, the number of permutations of M that avoid  $\sigma$  is equal to the number of permutations of M that avoid  $\tau$ . In this paper, we find a large new class of Multiset Wilf Equivalent pairs, namely, the pair  $(\sigma_{n-2}(n-1)n, \sigma_{n-2}n(n-1))$ , for  $n \geq 3$  and  $\sigma_{n-2}$  a permutation of  $\{1^{x_1}, 2^{x_2}, ..., (n-2)^{x_{n-2}}\}$ . It is the most general Multiset Wilf Equivalence result to date. (Received September 13, 2005)