## Neal Madras (madras@mathstat.yorku.ca) and Lerna Pehlivan*

(pehlivan@mathstat.yorku.ca), Department of Mathematics and Statistics, N520 Ross, 4700
Keele Street, Toronto, M3J 1P3, Canada. 312-Pattern Avoiding Permutations With Determined
Points. Preliminary report.
We study the 312-pattern avoiding permutations in $S_{n}$ that has one determined point below the diagonal as well as the 312 -pattern avoiding permutations with two determined points below the diagonal. We provide the formulas for the probabilities of having such permutations and we look at the approximations of the probabilities when $n$ is large. Moreover, we determine the expected value and the variance of 312-pattern avoiding permutations with determined points below the diagonal. (Received August 07, 2012)

