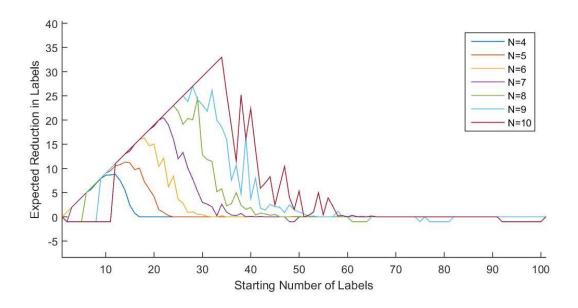
## Clarification on A3

## Expected Value of Reduction

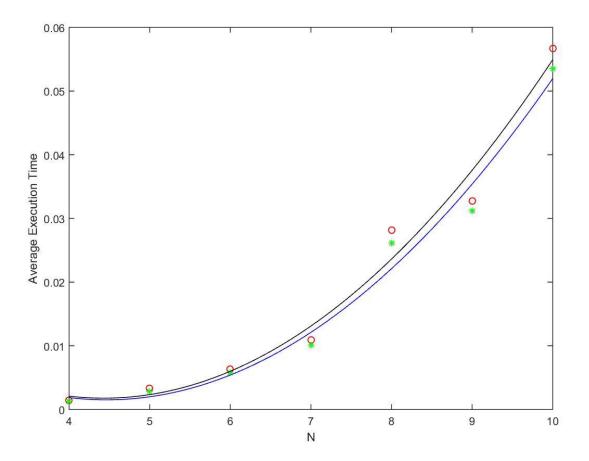
The figure below gives the kind of information that is sought; namely, for each N, what is the expected reduction in the number of labels for each starting number. For each N, get the experiments with n starting ones (this will be in the range 0 to N\*N) and average the reduction found for those experiments.



The Matlab function 'legend' is used to create the upper right legend.

## Time Complexity Analysis

The following plot shows the kind of output that can help describe the results of getting the average time (for each N) and then fitting a function to that.



As mentioned in class, polyfit can be used to get the parameters and error (which should be reported) as well as polyval which can be used to generate the quadratic curve data in the plot.