

2) (10 pts) ANL (Algorithm Analysis)

A brute force algorithm which processes all permutations of n routines runs in $O(n \times (n!))$ time. On a particular computer, executing the algorithm for $\mathbf{n} = \mathbf{9}$ takes 180 milliseconds. How many seconds is the algorithm expected to take on an input of size $\mathbf{n} = \mathbf{11}$, run on the same computer?