

CSE780 Homework 1
Due Wednesday, Jan 12

1. Page 73-74 : 4-4 (a,d and f) (1st edition). Page 86 : 4-4 (a,g,j) (2nd edition)
Page 108 : 4-3 (a,g,j) (3rd edition)
2. Determine the asymptotic complexity of the following functions (Do not use Master Theorem), assuming $c > 0$. If $n \leq 4$ then $T(n) = 1$, otherwise
 - (a) $T(n) = 2T(n/2) + cn^2$
 - (b) $T(n) = 5T(n/2) + cn^2$
3. Page 152: 7-1 (1st edition), page 142: 6-1 (2nd edition), page 166: 6-1 (3rd edition)

(The grader will only grade a subset of these problems.)