

CSE6331 Homework 1  
Due Tuesday, Sep 04

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.)