**CSE254 Introduction to Discrete Systems. Fall 2007**

Home work 4. Due on December 10 (9:30 AM).

1. Section 6.1: Problems 22 and 32
2. Section 6.2: Problems 8 and 12
3. Section 7.1: Problem 8
4. Solve the following recurrence relations:

   (a)

$$T(n) = \begin{cases} 1 & n \leq 4 \\ 12T(n/4) + n^{1.5} & n > 4 \end{cases}$$

   (b)

$$T(n) = \begin{cases} 1 & n \leq 4 \\ T(\sqrt{n}) + \log n & n > 4 \end{cases}$$