# HW 1

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#### ECS 122B Spring 2020

## Problem 1

Problem 2.3 in Reference Material

### Problem 2

Problem 2.4 in Reference Material

### Problem 3

Problem 2.5 in Reference Material (Hint use recurrence tree or substitution when master theorem does not apply here)

## Problem 4

Design an algorithm that has the following recurrence relation

$$T(n) = T(n/5) + 3T(n/7) + n^3$$