1. CLRS Problem 6-2. (20 points)

2. CLRS Problem 9-2 (abde). (30 points) *Part c is extra credit.*

3. CLRS Problem 7-5. (30 points)

4. Let A and B be sorted lists each of length $n$. Design an algorithm that can find the median of both lists (i.e., if they were merged) in $O(\log n)$ time. Note that you cannot merge the lists in $O(\log n)$ time. (20 points)