

Assignment 1 solutions

Maths 190 / 190G

2007 51

Q1. 1 honest
99 crooked.

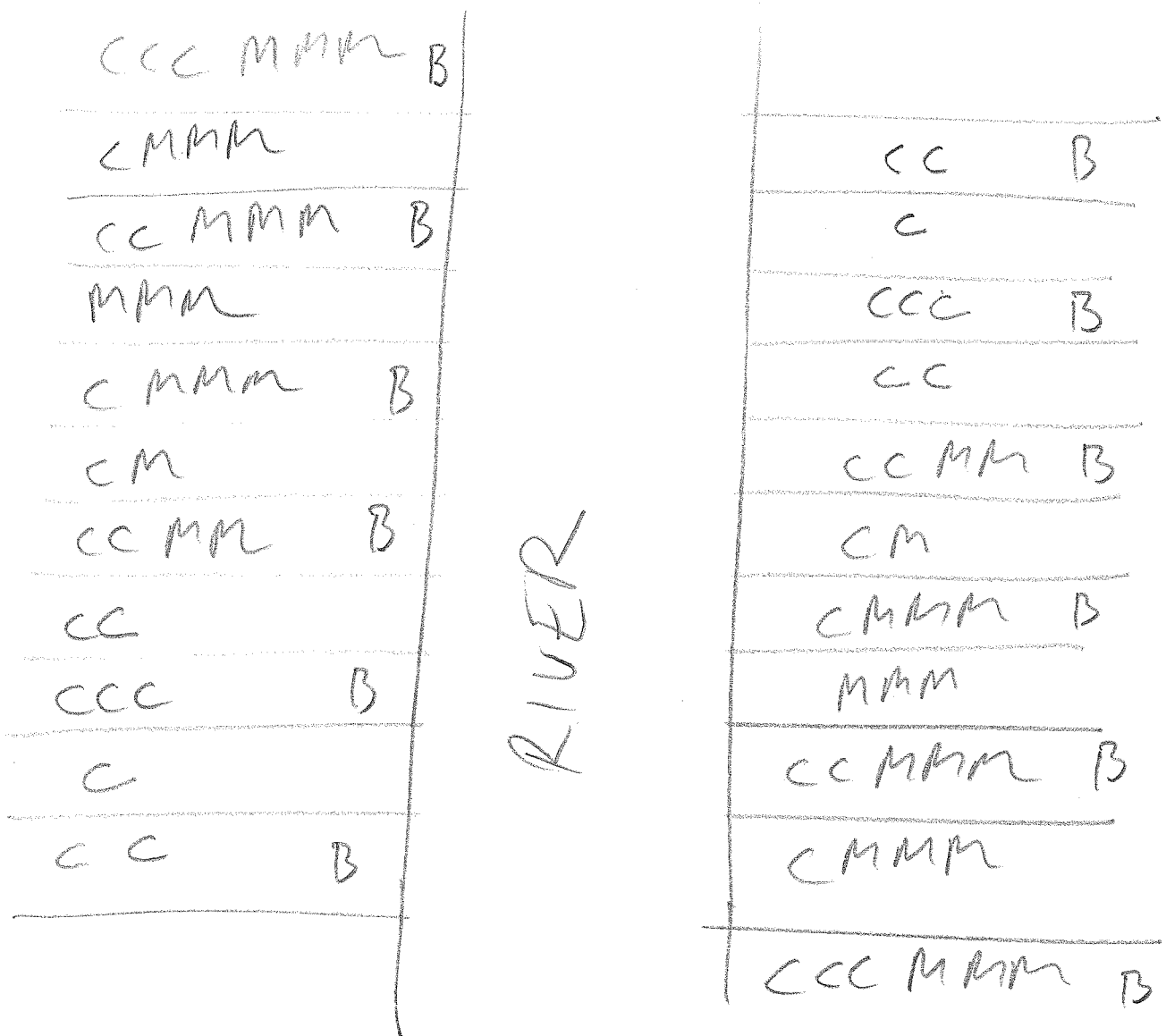
If there was more than one honest politician then we could find a pair of honest politicians, violating condition b.

Q2. Suppose dealer starts with X dollars in his pocket. Then at the end he has

$$X - 7 + 8 - 9 + 10 = X + 2.$$

So profit is \$2.

Q3. There are several solutions. Any solution must include a return voyage having two people in the boat. Here's one:



C - Cannibal
 M - Missionary
 B - Boat

Q4. A hint provided in the textbook is to put the pole in an appropriate box. Here's one possibility:

