

**problem 1 part a** , I just noticed from piazza that bob is not allowed to put him in debt.  
So please ignore my solution for part a).

Here is the correct one:

A game pays of 3000\$ with probability  $\frac{1}{5}$  and gives out 750\$ with probability of  $\frac{4}{5}$

Check Fairness:  $3000 * (\frac{1}{5}) - 750 * (\frac{4}{5}) = 0$

As a result, Bob would end up with 4100\$ with probability  $\frac{1}{5}$  and 350\$ with probability  $\frac{4}{5}$

Therefore, his expected utility is:  $\frac{1}{5} * 2 + \frac{4}{5} * 0 = 0.4 < 1$  (strictly decreases)

**Problem 2**, the first three games:

**Player 1** has move **C and D** ( the edge of the paper is not properly scanned)

**Player 2** has move **A and B**

**Problem 3**

Part C) : The strategy for the left information set are that L and R are mixed equally ( as in part b))