

- 1) Find the Perfect Bayesian equilibria of the signalling game of lecture 10 for  $p < 0.5$
- 2) Three persons play the following game. Person  $i$  receives a signal  $s_i$  that can be either 0 or 1,  $i \in \{1, 2, 3\}$ . Signals are independently distributed and each signal's probability of being 1 is 0.6. Each person observes only his signal but not the signal of the other persons. The probability distributions of the signals are common knowledge. Each person has to guess the sum of the signals. If the guess is correct, the player gets £1, otherwise she receives 0. Person 1 guesses first, person 2 observes the guess of player 1 before making his guess. Finally person 3 observes the guesses of players 1 and 2 before making his guess. Find the Perfect Bayesian equilibria
- 3) Consider the following game. *Nature* determines if payoffs are as in G1 or in G2 by equal probability

		Player 1		
		<b>G1</b>	L	C
Player 2	T	2,0	0, 1	4, 2
	M	3,4	1, 2	2, 3
	B	1, 3	0, 2	3, 0

		Player 1		
		<b>G2</b>	L	C
Player 2	T	2,0	0, 1	4, 0
	M	3,4	1, 2	2, 3
	B	1, 3	0, 2	3, 0

Player 1 knows which game *Nature* has chosen, but Player 2 does not. Player 1 moves first. Player 2 observes the choice of player 1 before to move. Find the Perfect Bayesian equilibria