

Rudolf Kerschbamer
Commitment and Information in Games

Problem Set 13
(PBNE in Signalling Games)

Name: _____

- 13.1 Anton (he) and Anna (she) plan their evening entertainment. He decides first. She observes his decision and then decides herself. They have the choice between football (F) and cinema (C). He has seen the weather forecast (which is always correct in our artificial world) and knows whether there will be fog in the evening or not. She does not know the weather forecast and assumes that “fog” and “no fog” occur with equal probability. Depending on whether there is fog or not, payoffs are given by the first or the second table (he is the row player, she is the column player):

no fog

	F	C
F	3, 2	1, 1
K	1, 1	2, 3

fog

	F	C
F	2, 1	0, 1
K	1, 0	2, 3

- a) Represent this situation as an extensive form game.

b) Solve for all perfect Bayesian Nash equilibria in pure strategies.

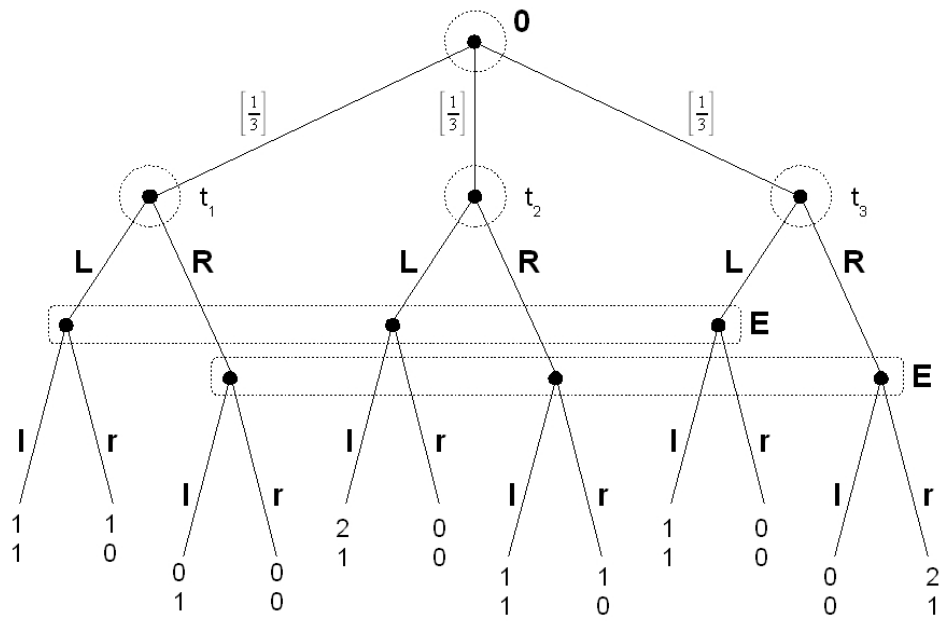
c) Now assume that payoffs in case of fog are given by the following table:

fog

	F	K
F	3, 1	1, 3
K	1, 1	2, 3

Again determine all perfect Bayesian Nash equilibria in pure strategies.

13.2 Consider the following signaling game:



Find a (pooling) Perfect Bayesian Nash Equilibrium where all types of the sender choose signal L.

13.3 Find all Perfect Bayesian Nash Equilibria in pure strategies for the following two signaling games:

