Problem set 3

1) Find all mixed strategy Nash equilibrium of the following game (you have to use the property of the Nash equilibrium in mixed strategies)

		Player 2		
		L	M	R
Player 1	T	2, 2	0, 3	1, 3
	B	3, 2	1, 1	0, 2

2) Consider the following game

		Player 2	
		L	R
Player 1	T	1, 2	1, 3
	M	4, 1	0, 1
	B	0, 3	3, 2

Find all mixed strategies that dominate strategy T

3) Is the following statement true?
"A mixed strategy that assigns positive probability to a strictly dominated action is strictly dominated"

4) Each of two firms has a job opening. The firms offer different wages: firm *i* offers wage w_i where $0.5 \cdot w_1 < w_2 < 2 \cdot w_1$.
There are two workers that want to apply for a job. Each of whom can apply to only one firm. The workers simultaneously decide whether apply to firm 1 or to firm 2.
If only one worker applies to a given firm, that worker gets the job. If both workers apply to one firm, the firm hires one worker at random and the other worker remains unemployed.
   a) Rapresent this game using the normal form
   b) Solve for the Nash equilibria (in pure and mixed strategies)