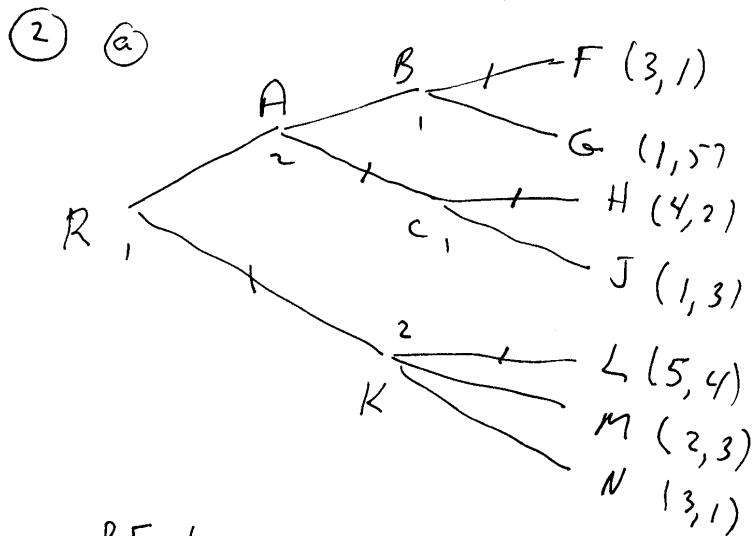


Math 304 Final June 2001

① $A = \begin{pmatrix} 1 & 1 & 4 \\ \textcircled{4} & 0 & \textcircled{7} \\ 2 & \textcircled{3} & 1 \end{pmatrix} \quad B = \begin{pmatrix} 4 & \textcircled{7} & 2 \\ 0 & 6 & \textcircled{7} \\ 1 & \textcircled{5} & 3 \end{pmatrix}$

Nash Equilibrium are $(3,2)$ position & $(2,3)$ position.
Payoff 385 787.



BF because $3 > 1$ for P_1
 CH because $4 > 1$ for P_1
 AC because $2 > 1$ for P_2
 KL because $5 > 3, 1$ for P_2
 RK because $5 > 4$ for P_1

$(\{RK, BF, CH\}, \{AC, KL\})$

Subgame perfect RKL.

⑤ (a) Nash equilibrium which is not subgame perfect can be obtained by P_2 changing AC to AB. RK still preferred to RA for P_1 , $5 > 3$.
 (i) P_2 can not get into subgame starting at A.
 (ii) P_1 changing CH to CJ: P_1 still prefers RK to RA, $5 > 1$.
 P_2 can not get into subgame starting at A.