

- (#1) (a) $B - P_1 - 3 > 2$ so choose BG
 $C - P_1 - 4 > 1$ so choose CH
 $A - P_2$ BG (3,2) vs CH (4,1) so chooses AB
 $K - P_2$ 3 > 2, 1 so choose KN.
 $R - P_1 - A (3,2) \& K (2,3)$ so chooses RA.

Strategies $(\{RA, BG, CH\}, \{AB, KN\})$.

- (b) A Nash equilibrium which is not a subgame perfect equilibrium is $(\{RA, BG, CH\}, \{AB, KM\})$ payoff (3,2) at node G.

Not a subgame perfect equilibrium because P_2 can increase payoff at K by switching from KM to KN.

It is a Nash equilibrium.

P_2 : choices at K do not offset payoff.
 Switching from AB to AC decrease payoff from 2 to 1 for P_2 .

P_1 : Player one can reach nodes F, G, & M by choices for P_1 while keeping AB & KM for the choice for P_2 .

Payoff for P_1 at these nodes are 2, 3, 1. Max is 3 at G. This is reached by the choices above so Nash.

Note $(\{RA, BG, CH\}, \{AB, KL\})$ is not Nash.

P_1 can increase payoff by changing to RK which reaches L with payoff 4 which is greater than 3.