

## 9.1 Nash Equilibrium - General

Wednesday, September 23, 2020 11:54 AM

- Solution Concepts so far
- 1) Strongly dominant strategies
  - 2) Weakly dominant strategies
  - 3) Set of rationalizable strategies  
↳ what if there's more than 1?
  - 4) Nash Equilibrium  
↳  $s_i$  is a NE if  $s_i \in BR_i(s_{-i}) \forall i$   
↳ or  $u_i(s_i, s_{-i}) \geq u_i(s'_i, s_{-i}) \forall i$

Conjunct

|       | $B_1$ | $B_2$ | $B_3$ |
|-------|-------|-------|-------|
| $A_1$ | 3, 1  | 2, 3  | 4, 0  |
| $A_2$ | 0, 6  | 0, 0  | 2, 0  |
| $A_3$ | 5, 2  | 1, 4  | 3, 1  |

Best replies given other player's strategy

$(A_1, B_2)$  is only pure strategy NE in game

- 1) Repeated observed play across society
- 2) Players talk before playing & honoring agreement