

Action Profile;  
 "Cartesian Product" of two sets

$A = [A_1 \times A_2]$  — all pairs of elements  $(x, y)$  where the first element belongs to  $A_1$  and the second to  $A_2$ .

$$A_1 = \{1, 2\} \quad A_2 = \{1, 2\}$$

$$A = A_1 \times A_2 = \{(1, 1), (1, 2), (2, 1), (2, 2)\}$$

Set of  
 "action profiles"

Payoffs :  $(u_i : A \rightarrow \mathbb{R})$

"Function" Set

Payoff (all real numbers)

Game

Strategy dominated if

$$\exists s_i' \forall s_{-i} (u_i(s_i', s_{-i}) > u_i(s_i, s_{-i}))$$

if. different way around the  
~~NE~~ NBR  $\rightarrow$  Never Best Response

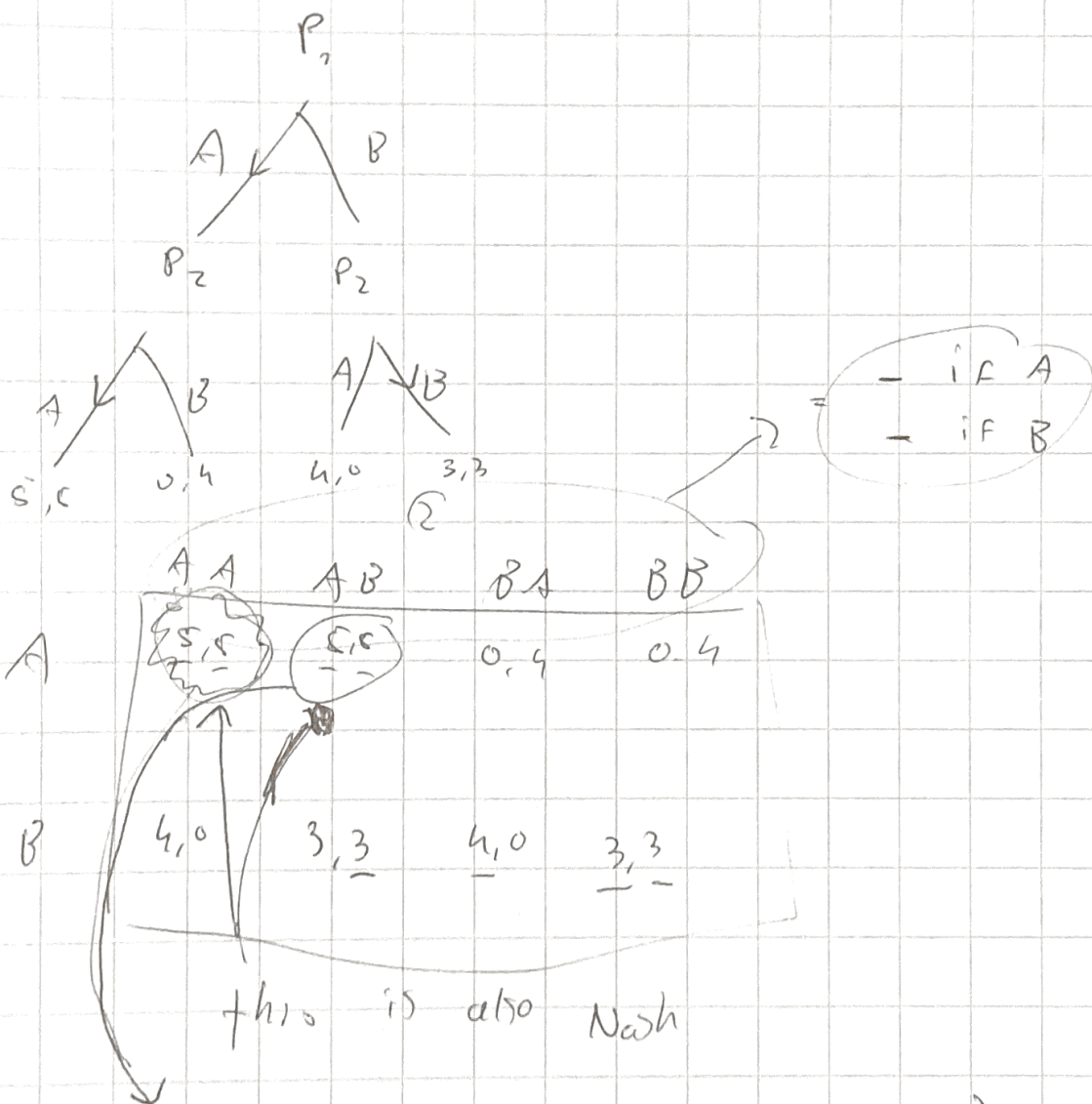


NE (Nash equilibrium) if:

$$\forall i \forall s_i (u(s_i, -) \geq u(s_i', -))$$

PE (Pareto efficient) if:

Sequence 1 Game



SPNE (Subgame Perfect equilibrium)

is  $(A, A)$

$\uparrow$   
 $=$   
 $A$  if  $A$   
 $B$  if  $B$