

# Simultaneous Games

	R	P	S
Rock	0, 0	-1, 1	1, -1
Paper	1, -1	0, 0	-1, 1
Scissors	1, -1	0, 0	0, 0

## Pennants

	L	R
L	$\frac{1}{2}, -\frac{1}{2}$	$\frac{1}{4}, -\frac{1}{4}$
R	$\frac{1}{4}, \frac{1}{4}$	$\frac{1}{2}, -\frac{1}{2}$

	W	X	Y	Z
A	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$
B	-1	$\frac{1}{2}$	$\frac{1}{4}$	$-\frac{1}{2}$
C	$\frac{1}{2}$	0	-1	$\frac{1}{2}$

## Statyut

	S	H
Soft	2, 2	0, 1
Hard	1, 0	1, 1



# Mixstrategien

	R	P	:
Rock 0	-1	1	
Paper 1	0	-1	
Scissors 1	1	0	

$x^*$  is a subgame perfect mixed strategy  
if and only if

$$E(x, y^*) \leq E(x)$$

Best response best response mixed strategy

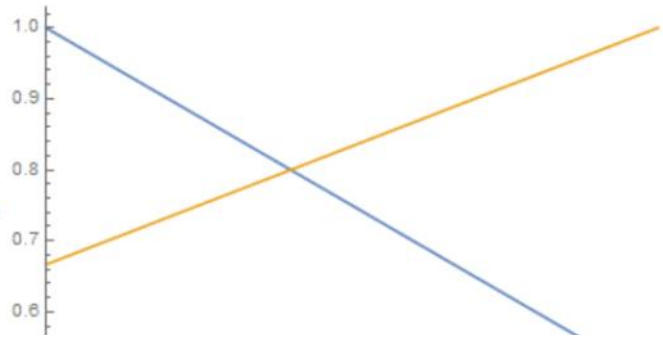
Find Saddle Point Mix Strategies

Then  $x^*, y^*$  is a saddle point mix strategy iff

$$E(i, y^*) \leq E(x^*, y^*) \leq E(x^*, j)$$

	F	C	S
F	0.30	2.50	2.0
C	8.20	3.30	3.3

L	$\frac{1}{2}$	R
R	1	$\frac{2}{3}$



$$A = \begin{pmatrix} 0 & -1 & 3 \\ 3 & 5 & -3 \end{pmatrix}$$





# Linear Programming

F C S

F 0.30 ~~0.25~~ 0.20

C 0.20 ~~0.33~~ 0.28

S 0.20 ~~0.30~~ 0.33

π