

Test
Advanced Microeconomics: Part II (Uwe Jirjahn)

Winter 2020/2021

Choose **two** questions out of the three questions Q1, Q2 and Q3.

Q.1 Consider the following normal-form game:

Player 2	A	B
Player 1		
C	2, -2	-2, 2
D	-2, 2	2, -2

Q.1.a Find the pure-strategy Nash equilibria.

Q.1.b Find the mixed-strategy Nash equilibria and calculate the players' expected payoffs.

Q.2 Consider the following normal-form game:

Player 2	a	b	c	d	e	f	g	h
Player 1								
T	1, 1	1, 1	1, 1	1, 1	3, 2	3, 2	3, 2	3, 2
M	4, 1	4, 1	2, 3	2, 3	2, 3	2, 3	4, 1	4, 1
B	5, 2	1, 1	5, 2	1, 1	5, 2	1, 1	5, 2	1, 1

Find the pure-strategy Nash equilibria by iterated elimination of dominated strategies.

Q.3 Consider the following normal-form game:

Player 2	A	S	L
Player 1			
A	3, 3	1, 4	0, 0
S	4, 1	0, 0	-1, -1
L	0, 0	-1, -1	-2, -2

Write down the set of strategy profiles and find the strategy profiles that constitute pure-strategy Nash equilibria.

Note: If you answer all questions, we will only consider Q.1 and Q.2.