

## IGT Quiz 1

1.

a) In a matrix  $A$ , when is  $U_c \leq U_r$ ?

b) If the above found condition is satisfied show that  $U_c \leq U_r$ .

2.

	$B_1$	$B_2$
$A_1$	0, 0	10, 10
$A_2$	-20, 10	20, 0

Are there any PSNEs? Reason out why if yes/no. Find the MSNE of the game.

3.

	$B_1$	$B_2$
$A_1$	2	1
$A_2$	-1	3

Solve the above zero sum game graphically.

4.

	$B_1$	$B_2$	$B_3$	$B_4$
$A_1$	5, 6	5, 6	6, 7	6, 7
$A_2$	4, 6	6, 7	6, 5	6, 5
$A_3$	4, 5	4, 5	5, 6	7, 4
$A_4$	5, 1	4, 1	7, 1	6, 1

Find an equilibrium for this game by iterated dominance. Explain each elimination (Strongly/weak dominance). Is the found equilibrium a PSNE?