Positive Political Theory

Exercise

1. Consider this preference profile, where the number indicates the preference ranking of each voter.

	A	B	C
1st	(1,1)	(1,0)	(0,1)
2nd	(0,0)	(0,0)	(0,0)
3rd	(0,1)	(1,1)	(1,1)
4th	(1,0)	(0,1)	(1,0)

(1) Is there a Condorcet winner?

(2) Determine whether this preference profile is separable.

(3) If A knows the preference of B and C, how would she vote? Will the result be a Condorcet winner?

2. A parliament is deliberating three bills, where no party is the majority. The payoffs of each party are as follows.

Party	(0, 0, 0)	(1, 0, 0)	(0, 1, 0)	(0, 0, 1)	(1, 1, 0)	(1, 0, 1)	(0, 1, 1)	(1, 1, 1)
A	0	2	4	-5	6	-3	-1	1
B	0	4	-5	2	-1	6	-3	1
C	0	-5	2	4	-3	-1	6	1

(1) Are the preferences separable?

(2) Is there a Condorcet winner?

(3) What is the result of sincere voting?

(4) How would the parties trade their votes?

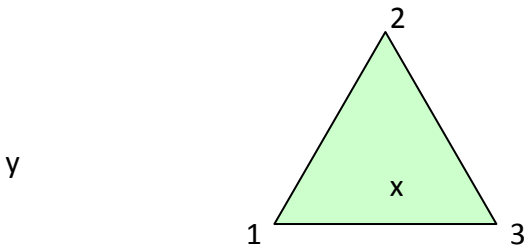
3. Consider the following case. If no party controls the majority, and only a majority coalition can adopt a bill, what is the most likely result of majority rule?

	A	B	C
w. (n, n)	(2, 2)	(3, 3)	(4, 4)
x. (y, n)	(1, 1)	(4, 4)	(1, 1)
y. (n, y)	(3, 3)	(1, 1)	(2, 2)
z. (y, y)	(4, 4)	(2, 2)	(3, 3)

4. How about this?

	A	B	C
w. (n, n)	(4, 0)	(2, 4)	(-4, 12)
x. (y, n)	(1, 1)	(4, 4)	(3, -1)
y. (n, y)	(2, 4)	(-1, 3)	(-2, 6)
z. (y, y)	(9, -1)	(-2, 6)	(4, 2)

5. The following is a spatial model portraying preferences of three voters. Show that y is possible under majority rule.

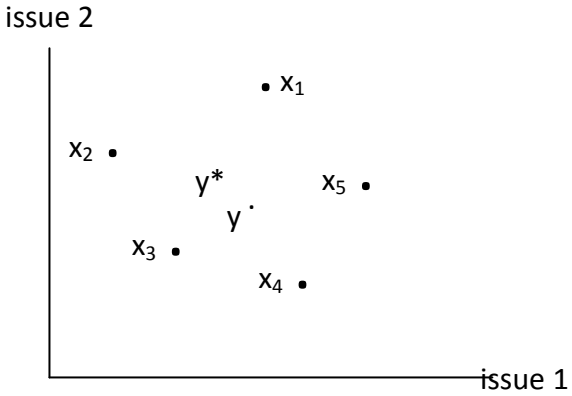


6. A committee is composed of five members whose ideal points are x_1, x_2…x_5.

(1) Is there a Condorcet winner?

(2) What if each issue is voted separately?

(3) What happens if the issue-by-issue median is not a Condorcet winner? Which members have the incentive to change the outcome? How?



.

7. In the above example, is there any incentive for any member to vote strategically? For example, is there any way for member 1 to bring about y* under issue-by-issue voting?