

Name _____

PS 1211: Legislative Process

Homework One

Unidimensional Spatial Model

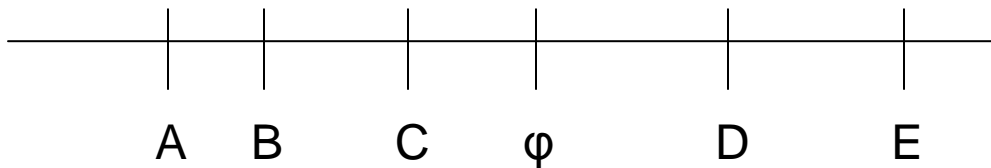
Instructions: Complete the following problems. Each problem is worth 10 points (100 points total). Show your work. (Note: Some of these problems are identical or nearly identical to problems in the Stewart textbook.)

1. Circle the median voter on the following committees, with the ideal points as given. (Hint: There may be more than one):
 - a. $A=200, B=100, C=25, D=16, E=22, F=63, G=57$
 - b. $A=200, B=100, C=25, D=16, E=22, F=63, G=75$
 - c. $A=200, B=100, C=57, D=16, E=22, F=63, G=57$
 - d. $A=200, B=100, C=25, D=16, E=22, F=63$
 - e. $A=200, B=100, C=25, D=16, E=22, F=63, G=57, H=22$

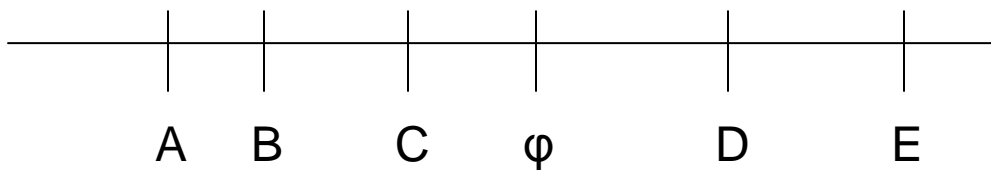
2. Suppose that each of the preceding committees voted on the following alternatives: $X=60, Y=65$. Assume that the utility functions are symmetrical and that voting proceeds under majority rule. Circle the resulting policy outcome for each committee.
 - a. X Y
 - b. X Y
 - c. X Y
 - d. X Y
 - e. X Y

3. For the following questions, consider a five-member committee with ideal points labeled A, B, C, D and E, and a status quo of ϕ , which is located between ideal points C and D.

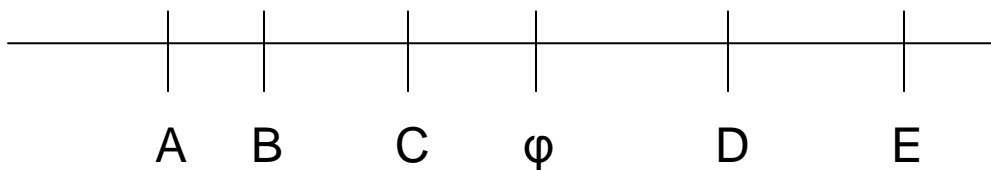
- a. Draw the preferred-to set for committee member A.



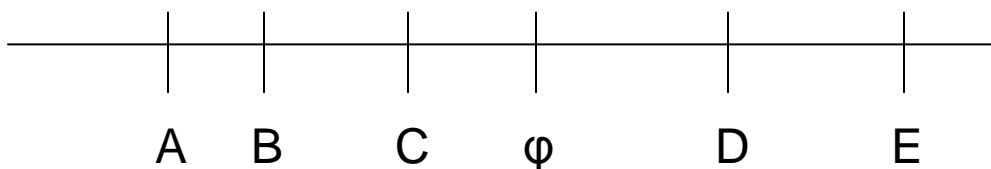
- b. Draw the preferred-to set for committee member B.



- c. Draw the preferred-to set for committee member D.



- d. Draw the winset against ϕ .



- e. What is the relationship between the concept of the preferred-to set and the winset?

4. For the following questions, consider the same five-member committee with ideal points labeled A, B, C, D and E, and a status quo of ϕ .

- a. Suppose that committee members may propose their ideal points in the following order: E, C, A. In other words, the first vote is between the status quo and E, the second vote is between the winner of the first vote and C, and so on. Where will the policy be at the end of the agenda? Fill in each blank below.

Vote 1: ϕ vs. E \rightarrow ___ votes: A__ B__C__ D __ E__

Vote 2: ___ vs. C \rightarrow ___ votes: A__ B__C__ D __ E__

Vote 3: ___ vs. A \rightarrow ___ votes: A__ B__C__ D __ E__

- b. Considering the same committee as above, suppose now the agenda is C, B, D. What will the policy be at the end of the agenda? Fill in each blank below.

Vote 1: ϕ vs. C \rightarrow ___ votes: A__ B__C__ D __ E__

Vote 2: ___ vs. B \rightarrow ___ votes: A__ B__C__ D __ E__

Vote 3: ___ vs. D \rightarrow ___ votes: A__ B__C__ D __ E__

- c. What, if any, is the effect of agenda control on the median voter result?

- d. Considering the same committee as above, suppose now that all votes are under supermajority rule and that a proposal must garner four of the five votes to win. Suppose the agenda is E, C, A.

Vote 1: ϕ vs. E \rightarrow ___ votes: A__ B__C__ D __ E__

Vote 2: ___ vs. C \rightarrow ___ votes: A__ B__C__ D __ E__

Vote 3: ___ vs. A \rightarrow ___ votes: A__ B__C__ D __ E__

- e. What, if any, is the effect of supermajority requirements on the median voter result?

5. For the following questions, assume there are three legislators (1, 2, and 3) voting over three alternatives (X, Y, and Z).

a. Suppose the legislators rank the alternatives in the following manner:

Legislator 1: $X > Y > Z$

Legislator 2: $Y > Z > X$

Legislator 3: $Z > X > Y$

Further suppose that the rules of the legislature specify that the first vote will be between X and Y, with the winning motion then put against Z. How does each legislator vote on each vote and what is the outcome, assuming that legislators vote sincerely?

Vote 1: X vs. Y → ___ votes: L1__ L2__L3__

Vote 2: ___ vs. Z → ___ votes: L1__ L2__L3__

b. Assume the same rankings and agenda as part 5a, but now assume that legislators vote strategically. How does each legislator vote on each vote and what is the outcome?

Vote 1: X vs. Y → ___ votes: L1__ L2__L3__

Vote 2: ___ vs. Z → ___ votes: L1__ L2__L3__

c. Now suppose the legislators rank the alternatives in the following manner:

Legislator 1: $X > Y > Z$

Legislator 2: $Y > Z > X$

Legislator 3: $Z > Y > X$

Further suppose that the rules of the legislature specify that the first vote will be between X and Y, with the winning motion then put against Z. How does each legislator vote on each vote and what is the outcome, assuming that legislators vote sincerely?

Vote 1: X vs. Y → ___ votes: L1__ L2__L3__

Vote 2: ___ vs. Z → ___ votes: L1__ L2__L3__

- d. Assume the same rankings and agenda as part 5c, but now assume that legislators vote strategically. How does each legislator vote on each vote and what is the outcome?

Vote 1: X vs. Y → ___ votes: L1__ L2__L3__

Vote 2: __ vs. Z → __ votes: L1__ L2__L3__

- e. Identify, if any, the Condorcet winner in both of the preference orderings above (in 5a and 5c). How does the existence of a Condorcet winner affect legislators' choices of whether or not to vote strategically?