

## Voting Theory

A large family is trying to choose where they should go out to dinner. They have narrowed it down to three options:

- Argentine steak house (A)
- Biergarten (B)
- Chinese restaurant (C)

Each family member ranked the options in order of their preference. Here are the results:

rank												
1	A	A	A	A	A	C	C	C	B	B	B	C
2	B	B	B	B	C	B	B	B	C	C	C	A
3	C	C	C	C	B	A	A	A	A	A	A	B

1. Which choice is the least popular?

- Single transferrable
- Weighted average

- instant run off voting

2. Where should they go in order to please the most people?

Arguments for all - depending on the strategies above.

(a) Is there a convincing argument that they should go to option A?

(b) Is there a convincing argument that they should go to option B?

(c) Is there a convincing argument that they should go to option C?

3. They learn that the Chinese restaurant is closed. Does this change your answers to questions (a) and (b) above?

1

- Yes, can lead to other illogical outcomes depending on chosen voting strategy.