

Axiomatic Analysis

	Maximin	Optimism-pessimism	Minimax regret	Insufficient reason
1. Ordering	⊗	⊗	⊗	⊗
2. Symmetry	⊗	⊗	⊗	⊗
3. Strict dominance	⊗	⊗	⊗	⊗
4. Continuity	⊗	⊗	⊗	x
5. Interval scale	x	⊗	x	x
6. Irrelevant alternatives	⊗	⊗	--	⊗
7. Column linearity	--	--	⊗	⊗
8. Column duplication	⊗	⊗	⊗	--
9. Randomization	⊗	--	⊗	x
10. Special row adjunction	x	x	⊗	x

- -- → incompatible
- \cross → compatible
- ⊗ → characterize

- To prove a rule / principle
 - The mathematical equations of a rule / principle can be proven by a set of axioms that is compatible, and characterize that rule.
- A set of axioms that characterize, and is used to prove a rule / principle must be different between the set of axioms for other rules and principles (Re-watch lecture)

- Remark for *Irrelevant alternatives*
- Let's say $a_1 > a_2 > a_3$, insert a_4
 - It's plausible if $a_1 > a_2 > a_4 > a_3$
 - It is not plausible if $a_2 > a_1 > a_4 > a_3$