

# Week 3 Proofs

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## Ex 1

Rules of Inference deduce new true statements and conclusions from premises.

one standard rule: show premise, show how premises connect, and show how premises connect to conclusion

Modus Ponens - method of approving

Modus Tollens - method of denying

Hypothetical syllogism - chain together two conditional statements

Disjunctive syllogism - conclude one alternative is true when you know at least one of two things must be true and one of them is false.

Critical Row -  $p \rightarrow q$  is  $T$  and  $q$  is  $T$