

MFAL

• Rule CP or Deduction theorem ;

$$(P \wedge R) \rightarrow S \Leftrightarrow P \rightarrow (R \rightarrow S)$$

$$\begin{aligned} & (H_1, H_2, \dots, H_n, P) \Rightarrow Q \\ & (H_1, H_2, \dots, H_n) \Rightarrow (P \rightarrow Q) \end{aligned}$$

Instead of this
u can do this

?

$$\{P \vee Q, P \rightarrow R, Q \rightarrow S\}$$

$$S \vee R$$

$$\begin{array}{l} P \vee Q \\ \neg P \rightarrow Q \\ \neg R \rightarrow \neg P \\ \neg R \rightarrow Q \\ \hline \begin{array}{l} Q \rightarrow S \\ \neg R \rightarrow S \\ R \vee S \\ S \vee R \end{array} \end{array} \quad \vdash$$

?

$$\{P \vee Q, Q \rightarrow R, P \rightarrow M, \neg M\}$$

$$\text{conc } R \wedge (P \vee Q)$$

$$\begin{array}{l} P \rightarrow M \\ \neg M \\ \neg M \rightarrow \neg P \\ \neg P \\ \begin{array}{l} P \vee Q \\ \neg P \rightarrow Q \end{array} \end{array}$$

Q has to be true

TO DO LIST;

- Take keyboard for tablet
- Install termux in tab
- Modify termux for colorscheme
- install python in it
 - ↳ check if python in full power accessible in it

$\begin{cases} Q \\ Q \rightarrow R \\ R \end{cases}$ has to be true

! $\Phi \vdash P \rightarrow (Q \rightarrow R)$

■ $\Phi \cup \{P\} \vdash Q \rightarrow R$

$\Phi \cup \{P, Q\} \vdash R$

→ where

in the place of Φ we can use

$\{H_1, H_2, H_3, \dots, H_n\}$

$\{H_1, H_2, \dots, H_n\} \vdash C$

$H_1 \wedge H_2 \wedge \dots \wedge H_n \Rightarrow C$

inconsistent

For all has to be false
One should be false

To make C false

In other way;

$$H_1 \wedge H_2 \wedge \dots \wedge H_n \Rightarrow C \wedge \neg C$$

this gives the birth of contradiction.

$$\rightarrow H_1 \wedge H_2 \wedge \dots \wedge H_n \Rightarrow C \rightarrow C$$

$$H_1 \wedge H_2 \wedge \dots \wedge H_n \wedge C \Rightarrow C$$

[\therefore deduction theorem]

is consistent