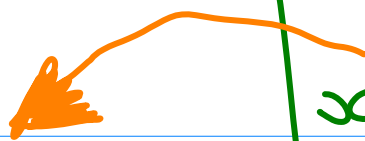


$$\begin{array}{c} P \rightarrow Q \\ \hline P \\ Q \end{array}$$



$$\begin{array}{c} x=4 \rightarrow y=2 \\ \hline x=4 \\ y=2 \end{array} \quad \begin{array}{c} F \\ \sim \\ \text{Sei} \end{array}$$

$$\underbrace{P \rightarrow Q \wedge P}_V \Rightarrow \underbrace{Q}_V$$

$$\textcircled{x=4}$$

$$\begin{array}{c} \forall x \quad Hx \rightarrow Mx \\ H(\text{"Socrates"}) \\ \hline M(\text{"Socrates"}) \end{array}$$

$$\begin{array}{c} \exists i \\ Qx \\ Py \\ Mx \end{array}$$

$$VL(Mx) = ?$$

$$VL(\underbrace{M(\text{"Frederick"})}) = \checkmark$$

$$Px \rightarrow My$$

$$Px \rightarrow Mx$$

$$Pi \rightarrow Mj$$

$$Pi \rightarrow Mi$$

$$Pi \rightarrow Mi \leftarrow$$

T	C	$T \rightarrow C$	\Leftrightarrow	$\neg T \vee C$
V	V	V		
V	F	F		
F	V	V		
F	F	V		

$$V_{T \rightarrow C} = V_{\neg T} \cup V_C$$

$$V_{\neg T} \cup V_C$$

$$T \Leftrightarrow G \Leftrightarrow T \rightarrow G \wedge G \rightarrow T$$

$$\Leftrightarrow (\neg T \vee G) \wedge (T \vee \neg G)$$

T	G	$T \Leftrightarrow G$
V	V	V
V	F	F
F	V	F
F	F	V

$$T \Leftrightarrow G \Leftrightarrow (T \wedge G) \vee (\neg T \wedge \neg G)$$

$$Gx \rightarrow Rx$$

$$Cx \wedge \forall x \rightarrow Sx$$

$$Ax \rightarrow Dx \wedge Nx$$

$$Ax \vee Lx \rightarrow Dx \wedge Nx$$

$$Px \wedge \neg Mx \rightarrow Rx$$

$$Cx \wedge Lx \rightarrow Gx \leftarrow \neg$$

$$Cx \rightarrow (Lx \leftrightarrow Gx) \leftarrow$$

$$Ex \rightarrow (Tx \leftrightarrow Sx)$$

$$Hx \wedge Cxy \rightarrow My$$

$$Gx \wedge Px \wedge Gy \wedge \neg Py \rightarrow Cxy$$