

1) $D = \text{"The dollar is strong"}$

$Y = \text{"The Yuan is strong"}$

$T = \text{"New US-China agreement signed"}$

(a) $T \Rightarrow (D \wedge Y)$

(b) $D \Rightarrow \neg Y$

(c) $\neg D \Rightarrow \neg T$

(d) $T \Rightarrow \neg (D \wedge Y)$

(e) $T \Rightarrow \neg D \wedge Y$

(f) ~~$T \Rightarrow$~~ $T \wedge Y \Rightarrow \neg D$

(g) $T \Rightarrow (D \wedge Y) \vee (\neg D \wedge \neg Y)$

(h) $T \Rightarrow (D \wedge \neg Y) \vee (\neg D \wedge Y)$

2) $\phi \quad \neg \phi \quad \psi \quad \phi \Rightarrow \psi \quad \neg \phi \vee \psi$

T	F	T	T	T
T	F	F	F	F
F	T	T	T	T
F	T	F	T	T

3) $\phi \Rightarrow \psi \Leftrightarrow \neg \phi \vee \psi$

4) $\phi \quad \psi \quad \neg \psi \quad \phi \Rightarrow \psi \quad \phi \not\Rightarrow \psi \quad \phi \wedge \neg \psi$

T	T	F	T	F	F
T	F	T	F	T	T
F	T	F	T	F	F
F	F	T	T	F	F

5) $\phi \not\Rightarrow \psi \Leftrightarrow \phi \wedge \neg \psi$