$$C_{VAL} = \underset{'1}{A} \wedge \underset{'2}{B}$$

::CNF

C :: Symb

'3 $C \iff C_{VAL}$

$C \rightarrow C_{VAL}$

AND $C_{VAL} \rightarrow C$

AND $\begin{cases} \bar{C} \vee C_{VAL} & 1) \\ \bar{C}_{VAL} \vee C & 2) \end{cases}$

$A \rightarrow B \equiv \bar{A} \vee B$

A	B	A→B	$\bar{A} \vee B$
0	0	1	1
0	1	1	1
1	0	0	0
1	1	1	1

1) $\bar{C} \vee [(\overset{\vee}{\underset{\cdots}{OR}}) \wedge (\overset{\vee}{\underset{\cdots}{OR}})]$

$\Rightarrow [(\bar{C} \vee \overset{\vee}{\underset{\cdots}{OR}}) \overset{AND}{\wedge} (\bar{C} \vee \overset{\vee}{\underset{\cdots}{OR}})]$

2) $C \vee \overline{C_{VAL}} \rightarrow$ CNF

$\Rightarrow [(C \vee \overset{\vee}{\underset{\cdots}{OR}}) \wedge (C \vee \overset{OR}{\underset{\cdots}{\cdots}})]$

1) CNF AND 2) CNF

still CNF ✓

$$\begin{bmatrix} 3 & 1 & -2 \\ -3 & -1 & 2 \end{bmatrix}$$