Д/з к 1103 док-ть

1) $a \to (c \to b),\ d \to a,\ c \Rightarrow d \to b$

2) $1 \Rightarrow (a \to b) \to ((c \to d) \to ((a \vee c) \to (b \vee d)))$

3) $a \to c,\ a \vee b,\ b \to d,\ d \to c \Rightarrow c$

4) $a \vee c,\ c \to \bar{d},\ a \to d,\ b \vee c \Rightarrow d \to (b \wedge d)$

---

a	b	∧	∨	→	~
0	0	0	0	1	1
0	1	0	1	1	0
1	0	0	1	0	0
1	1	1	1	1	1

$a, b \Rightarrow c, d$

0, 1

$\not\Leftarrow$

$a \wedge b \Rightarrow a$

∧ , (только слева)
∨ , (только справа)
→ ⇒

$a, b \Rightarrow c, d$

$a \Rightarrow c, d, \bar{b}$

$\bar{c}, a, b \Rightarrow d$

$a \wedge b \Rightarrow c \vee d$

$a \to b = \bar{a} \vee b$

$a \to (c \to b),\ d \to a,\ c \Rightarrow d \to b$

$\bar{d} \vee b$

$\bar{d}, b$

$\not\Leftarrow$

0, 0, 0, 0

$d, d \to a \Rightarrow a$

$a \to (\ ),\ c,\quad d, d \to a \Rightarrow b$

$a \to (\ ),\ c,\ a \Rightarrow b$

$c \to b,\ c \Rightarrow b$

$a \Rightarrow b$

$1 \wedge a \Rightarrow b \vee 0$

$1, a \Rightarrow b, 0$

$1 \Rightarrow \bar{a} \vee b$, $1 \Rightarrow a \to b$

$a \wedge \bar{b} \Rightarrow 0$

$a \to b \Rightarrow b \to a$

$\bar{a} \vee b \Rightarrow \bar{b} \vee a$

$b \wedge (\bar{a} \vee b) \Rightarrow a$

$(\bar{a} \wedge b) \vee (b \wedge b) \Rightarrow a$

a = 0
b = 1

~~1 ⇒ 0~~

$a \to b \Rightarrow \bar{b} \to \bar{a}$

$a \to b \Rightarrow b \vee \bar{a}$

$a, a \to b \Rightarrow b$

$1 \Rightarrow (a \to b) \to ((c \to d) \to ((a \vee c) \to (b \vee d)))$

$1 \Rightarrow \overline{(a \to b)} \vee ((c \to d) \to ((a \vee c) \to (b \vee d)))$

$(a \to b) \wedge 1 \Rightarrow (c \to d) \to ((a \vee c) \to (b \vee d))$

$a \to b \Rightarrow \overline{(c \to d)} \vee ((a \vee c) \to (b \vee d))$

$(a \to b) \wedge (c \to d) \Rightarrow (a \vee c) \to (b \vee d)$

$(a \vee c) \wedge (a \to b) \wedge (c \to d) \Rightarrow (b \vee d)$

$a, a \to b \Rightarrow b$, $b \Rightarrow b \vee d$

$c, c \to d \Rightarrow d$

$(a \vee c) \wedge (\bar{a} \vee b) \wedge (\bar{c} \vee d) \Rightarrow b \vee d$

$\bar{b} \wedge \bar{d} \wedge (a \vee c) \wedge (\bar{a} \vee b) \wedge (\bar{c} \vee d) \Rightarrow 0$

$\bar{b} \wedge \bar{d} \wedge (a \vee c) \wedge (\bar{b} \to \bar{a}) \wedge (\bar{d} \to \bar{c}) \Rightarrow 0$

$\bar{a} \wedge \bar{c} \wedge (a \vee c) \Rightarrow 0$

$\overline{(a \vee c)} \wedge (a \vee c) \Rightarrow 0$

$\bar{x} \wedge x \Rightarrow 0$