

Цайковская И. ПЗ1 ЭИЧП

11.14

1. $x \leftrightarrow y$ - истина

$$\Rightarrow y \rightarrow x$$

2. $x \leftrightarrow y$ - истина

$$\Rightarrow \bar{x} \leftrightarrow y \text{ и } x \leftrightarrow \bar{y} \text{ ложно}$$

3. $x = 1 \quad \bar{x} = 0$

$$\bar{x} \wedge y \rightarrow z$$

$$\bar{x} \rightarrow (y \vee z) \quad x = 0$$

x	y	z	x	y	z
0	1	1	0	1	1
0	0	1	0	0	1

4. $x \rightarrow y = 1$

0	0
0	1

$$z \rightarrow (x \rightarrow y)$$

$x \rightarrow y \rightarrow y$ истина

т.к.

x	y
0	1
0	1

Умиковский Н. 131 ЭМН

1.15

$$\begin{pmatrix} x=0 \\ y=1 \end{pmatrix} = -1$$

$$1. x \wedge (y \vee z) = \overset{0}{x}(\overset{0}{y} \vee \overset{1}{z}) = 0 \cdot 1 = 0$$

$$2. (\overset{0}{x} \wedge \overset{1}{y}) \vee y = 0 \cdot 1 = 0$$

$$3. x \rightarrow (\overset{1}{y} \rightarrow \overset{1}{z}) = 1$$

$$4. \overset{0}{x} \wedge \overset{1}{y} \rightarrow \overset{1}{z} = 1$$

$$5. x \wedge y \leftrightarrow z \vee \bar{y}$$

$$\begin{array}{ccc} 0 & 1 & \\ \hline 0 & 0 & \end{array} \leftrightarrow \begin{array}{ccc} 1 & 0 & \\ \hline 1 & 1 & \end{array} = 1$$

$$y=1$$

$$y=2$$

$$6. (x \vee y) \wedge z \leftrightarrow ((x \wedge z) \vee (y \wedge z)) =$$

$$\begin{array}{ccc} 0 & 1 & \\ \hline 1 & 1 & \end{array}$$

$$\begin{array}{ccc} 0 & 1 & 1 & 1 \\ \hline 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \end{array}$$

$$= (1 \cdot 1) \leftrightarrow (0 + 1) = (1 \leftrightarrow 1) = 1$$