## Nmatrix (level 0) in K45

•  $\mathcal{D} = \{\mathbf{t}_2, \mathbf{t}_1, \mathbf{t}, \mathbf{T}\}$ 

## Subformulas

- $(\varphi_0)$  p
- $(\varphi_1)$  q
- $(\varphi_2)$   $(p \rightarrow q)$
- $(\varphi_3) \square p$
- $(\varphi_4) \Box q$
- $(\varphi_5) \square (p \rightarrow q)$
- $(\varphi_6) (\Box p \rightarrow \Box q)$
- $(\varphi_7)$   $(\Box(p \rightarrow q) \rightarrow (\Box p \rightarrow \Box q))$

Id	$\varphi_0$	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$
$\overline{(1)}$	$\mathbf{F}$	$\mathbf{F}$	$\mathbf{T}$	$\mathbf{F}$	$\mathbf{F}$	${f T}$	${f T}$	$\mathbf{T}$
(2)	${f F}$	${f f}$	${f T}$	${f F}$	${f F}$	${f T}$	${f T}$	${f T}$
(3)	${f F}$	$\mathbf{f}_2$	${f T}$	${f F}$	${f T}$	${f T}$	${f T}$	${f T}$
(4)	${f F}$	$\mathbf{t}_2$	${f T}$	${f F}$	${f F}$	${f T}$	${f T}$	${f T}$
(5)	${f F}$	${f t}$	${f T}$	${f F}$	${f F}$	${f T}$	${f T}$	${f T}$
(6)	${f F}$	${f T}$	${f T}$	${f F}$	${f T}$	${f T}$	${f T}$	${f T}$
(7)	${f f}$	${f F}$	${f t}$	${f F}$	${f F}$	${f F}$	${f T}$	${f T}$
(8)	${f f}$	${f f}$	${f T}$	${f F}$	${f F}$	${f T}$	${f T}$	${f T}$
(9)	${f f}$	${f f}$	${f t}$	${f F}$	${f F}$	${f F}$	${f T}$	${f T}$
(10)	${f f}$	$\mathbf{f}_2$	${f T}$	${f F}$	${f T}$	${f T}$	${f T}$	${f T}$
(11)	${f f}$	$\mathbf{t}_2$	${f t}$	${f F}$	${f F}$	${f F}$	${f T}$	${f T}$
(12)	${f f}$	${f t}$	${f T}$	${f F}$	${f F}$	${f T}$	${f T}$	${f T}$
(13)	${f f}$	${f t}$	${f t}$	${f F}$	${f F}$	${f F}$	${f T}$	${f T}$
(14)	${f f}$	${f T}$	${f T}$	${f F}$	${f T}$	${f T}$	${f T}$	${f T}$
(15)	$\mathbf{f}_1$	$\mathbf{f}_1$	$\mathbf{t}_1$	$\mathbf{t}_1$	$\mathbf{t}_1$	$\mathbf{t}_1$	$\mathbf{t}_1$	$\mathbf{t}_1$

Id	$\varphi_0$	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$arphi_5$	$\varphi_6$	$\varphi_7$
(16)	$\mathbf{f}_1$	$\mathbf{t}_1$						
(17)	$\mathbf{f}_2$	${f F}$	$\mathbf{t}_2$	${f T}$	${f F}$	${f F}$	${f F}$	${f T}$
(18)	$\mathbf{f}_2$	${f f}$	$\mathbf{t}$	${f T}$	${f F}$	${f F}$	${f F}$	${f T}$
(19)	$\mathbf{f}_2$	$\mathbf{f}_2$	${f T}$					
(20)	$\mathbf{f}_2$	$\mathbf{t}_2$	$\mathbf{t}_2$	${f T}$	${f F}$	${f F}$	${f F}$	${f T}$
(21)	$\mathbf{f}_2$	$\mathbf{t}$	$\mathbf{t}$	${f T}$	${f F}$	${f F}$	${f F}$	${f T}$
(22)	$\mathbf{f}_2$	${f T}$						
(23)	$\mathbf{t}_2$	${f F}$	$\mathbf{f}_2$	${f F}$	${f F}$	${f T}$	${f T}$	${f T}$
(24)	$\mathbf{t}_2$	${f f}$	$\mathbf{f}_2$	${f F}$	${f F}$	${f T}$	${f T}$	${f T}$
(25)	$\mathbf{t}_2$	$\mathbf{f}_2$	$\mathbf{f}_2$	${f F}$	${f T}$	${f T}$	${f T}$	${f T}$
(26)	$\mathbf{t}_2$	$\mathbf{t}_2$	${f T}$	${f F}$	${f F}$	${f T}$	${f T}$	${f T}$
(27)	$\mathbf{t}_2$	$\mathbf{t}$	${f T}$	${f F}$	${f F}$	${f T}$	${f T}$	${f T}$
(28)	$\mathbf{t}_2$	${f T}$	${f T}$	${f F}$	${f T}$	${f T}$	${f T}$	${f T}$
(29)	$\mathbf{t}_1$	$\mathbf{f}_1$	$\mathbf{f}_1$	$\mathbf{t}_1$	$\mathbf{t}_1$	$\mathbf{t}_1$	$\mathbf{t}_1$	$\mathbf{t}_1$
(30)	$\mathbf{t}_1$							
(31)	$\mathbf{t}$	${f F}$	${f T}$	${f T}$				
(32)	$\mathbf{t}$	${f f}$	${f T}$	${f T}$				
(33)	$\mathbf{t}$	${f f}$	$\mathbf{f}_2$	${f F}$	${f F}$	${f T}$	${f T}$	${f T}$
(34)	$\mathbf{t}$	$\mathbf{f}_2$	$\mathbf{f}_2$	${f F}$	${f T}$	${f T}$	${f T}$	${f T}$
(35)	${f t}$	$\mathbf{t}_2$	${f t}$	${f F}$	${f F}$	${f F}$	${f T}$	${f T}$
(36)	${f t}$	${f t}$	${f T}$	${f F}$	${f F}$	${f T}$	${f T}$	${f T}$
(37)	${f t}$	${f t}$	${f t}$	${f F}$	${f F}$	${f F}$	${f T}$	${f T}$
(38)	${f t}$	${f T}$	${f T}$	${f F}$	${f T}$	${f T}$	${f T}$	${f T}$
(39)	${f T}$	${f F}$	${f F}$	${f T}$	${f F}$	${f F}$	${f F}$	${f T}$
(40)	${f T}$	${f f}$	${f f}$	${f T}$	${f F}$	${f F}$	${f F}$	${f T}$
(41)	${f T}$	$\mathbf{f}_2$	$\mathbf{f}_2$	${f T}$				
(42)	${f T}$	$\mathbf{t}_2$	$\mathbf{t}_2$	${f T}$	${f F}$	${f F}$	${f F}$	${f T}$
(43)	${f T}$	$\mathbf{t}$	$\mathbf{t}$	${f T}$	${f F}$	${f F}$	${f F}$	${f T}$
(44)	$\mathbf{T}$							