

## Model schemes

**Note:**  $\textcircled{1}$  means the candidate set must contain the element 1,  $\textcircled{0}$  means any non-empty set not containing the element 1. The field containing the symbol  $-$  means that result of the  $+_h$  operation is not defined. Red elements are superfluous due to commutativity, i.e. it suffices to generate just black results. Since  $0 +_h x$  is defined for all elements and  $x \in 0 +_h x$ , we denote any set containing  $x$  by  $\textcircled{x}$ .

For each  $n$  we assume that elements of the hyper effect algebra are denoted as  $\{0, a, b, \dots, 1\}$ .

**n = 1**

$+_h$	<b>0</b>
<b>0</b>	$\{0\}$

**n = 2**

$+_h$	<b>0</b>	<b>1</b>
<b>0</b>	$\{0\}$	$\textcircled{1}$
<b>1</b>	$\textcircled{1}$	-

**n = 3**

$+_h$	<b>0</b>	<b>a</b>	<b>1</b>
<b>0</b>	$\{0\}$	$\textcircled{a}$	$\textcircled{1}$
<b>a</b>	$\textcircled{a}$	$\textcircled{1}$	-
<b>1</b>	$\textcircled{1}$	-	-

**n = 4**

Relation no. 1:

	<b>0</b>	<b>a</b>	<b>b</b>	<b>1</b>
<b>0</b>	1	1	1	1
<b>a</b>		1		1
<b>b</b>			1	1
<b>1</b>				1

Model scheme no. 1,  $a' = a, b' = b$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>1</b>
<b>0</b>	$\{0\}$	$\textcircled{a}$	$\textcircled{b}$	$\textcircled{1}$
<b>a</b>	$\textcircled{a}$	$\textcircled{1}$	-	-
<b>b</b>	$\textcircled{b}$	-	$\textcircled{1}$	-
<b>1</b>	$\textcircled{1}$	-	-	-

Model scheme no. 2,  $a' = b, b' = a$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	①
<b>a</b>	@	-	①	-
<b>b</b>	Ⓟ	①	-	-
<b>1</b>	①	-	-	-

Relation no. 2:

	<b>0</b>	<b>a</b>	<b>b</b>	<b>1</b>
<b>0</b>	1	1	1	1
<b>a</b>		1	1	1
<b>b</b>			1	1
<b>1</b>				1

Model scheme no. 3,  $a' = b, b' = a$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	①
<b>a</b>	@	○	①	-
<b>b</b>	Ⓟ	①	-	-
<b>1</b>	①	-	-	-

**n = 5**

Relation no. 1:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>1</b>
<b>0</b>	1	1	1	1	1
<b>a</b>		1			1
<b>b</b>			1		1
<b>c</b>				1	1
<b>1</b>					1

Model scheme no. 1,  $a' = a, b' = b, c' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	Ⓢ	①
<b>a</b>	@	①	-	-	-
<b>b</b>	Ⓟ	-	①	-	-
<b>c</b>	Ⓢ	-	-	①	-
<b>1</b>	①	-	-	-	-

Model scheme no. 2,  $a' = a, b' = c, c' = b$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	Ⓢ	①
<b>a</b>	@	①	-	-	-
<b>b</b>	Ⓟ	-	-	①	-
<b>c</b>	Ⓢ	-	①	-	-
<b>1</b>	①	-	-	-	-

Relation no. 2:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>1</b>
<b>0</b>	1	1	1	1	1
<b>a</b>		1			1
<b>b</b>			1	1	1
<b>c</b>				1	1
<b>1</b>					1

Model scheme no. 3,  $a' = a, b' = c, c' = b$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	Ⓞ	Ⓜ
<b>a</b>	Ⓞ	Ⓜ	-	-	-
<b>b</b>	Ⓟ	-	Ⓞ	Ⓜ	-
<b>c</b>	Ⓞ	-	Ⓜ	-	-
<b>1</b>	Ⓜ	-	-	-	-

Relation no. 3:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>1</b>
<b>0</b>	1	1	1	1	1
<b>a</b>		1		1	1
<b>b</b>			1		1
<b>c</b>			1	1	1
<b>1</b>					1

Model scheme no. 4,  $a' = b, b' = a, c' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	Ⓞ	Ⓜ
<b>a</b>	Ⓞ	-	Ⓜ	Ⓞ	-
<b>b</b>	Ⓟ	Ⓜ	-	-	-
<b>c</b>	Ⓞ	Ⓞ	-	Ⓜ	-
<b>1</b>	Ⓜ	-	-	-	-

Relation no. 4:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>1</b>
<b>0</b>	1	1	1	1	1
<b>a</b>		1	1	1	1
<b>b</b>			1	1	1
<b>c</b>				1	1
<b>1</b>					1

Model scheme no. 5,  $a' = c, b' = b, c' = a$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	Ⓞ	Ⓜ
<b>a</b>	Ⓞ	Ⓞ	Ⓞ	Ⓜ	-
<b>b</b>	Ⓟ	Ⓞ	Ⓜ	-	-
<b>c</b>	Ⓞ	Ⓜ	-	-	-
<b>1</b>	Ⓜ	-	-	-	-

Relation no. 5:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>1</b>
<b>0</b>	1	1	1	1	1
<b>a</b>		1	1		1
<b>b</b>			1	1	1
<b>c</b>		1		1	1
<b>1</b>					1

Model scheme no. 6,  $a' = a$ ,  $b' = c$ ,  $c' = b$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>1</b>
<b>0</b>	{0}	@	(b)	(c)	(1)
<b>a</b>	(a)	(1)	-	(c)	-
<b>b</b>	(b)	-	(c)	(1)	-
<b>c</b>	(c)	(c)	(1)	-	-
<b>1</b>	(1)	-	-	-	-

**n = 6**

Relation no. 1:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1				1
<b>b</b>			1			1
<b>c</b>				1		1
<b>d</b>					1	1
<b>1</b>						1

Model scheme no. 1,  $a' = a$ ,  $b' = b$ ,  $c' = c$ ,  $d' = d$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	(b)	(c)	(d)	(1)
<b>a</b>	(a)	(1)				-
<b>b</b>	(b)		(1)			-
<b>c</b>	(c)			(1)		-
<b>d</b>	(d)				(1)	-
<b>1</b>	(1)	-	-	-	-	-

Model scheme no. 2,  $a' = a$ ,  $b' = b$ ,  $c' = d$ ,  $d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	(b)	(c)	(d)	(1)
<b>a</b>	(a)	(1)				-
<b>b</b>	(b)		(1)			-
<b>c</b>	(c)				(1)	-
<b>d</b>	(d)			(1)		-
<b>1</b>	(1)	-	-	-	-	-

Model scheme no. 3,  $a' = b$ ,  $b' = a$ ,  $c' = d$ ,  $d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	(b)	(c)	@	(1)
<b>a</b>	(a)		(1)			-
<b>b</b>	(b)	(1)				-
<b>c</b>	(c)				(1)	-
<b>d</b>	(d)			(1)		-
<b>1</b>	(1)	-	-	-	-	-

Relation no. 2:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1				1
<b>b</b>			1			1
<b>c</b>				1	1	1
<b>d</b>					1	1
<b>1</b>						1

Model scheme no. 4,  $a' = a$ ,  $b' = b$ ,  $c' = d$ ,  $d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	(b)	(c)	@	(1)
<b>a</b>	(a)	(1)				-
<b>b</b>	(b)		(1)			-
<b>c</b>	(c)			(0)	(1)	-
<b>d</b>	(d)			(1)		-
<b>1</b>	(1)	-	-	-	-	-

Model scheme no. 5,  $a' = b$ ,  $b' = a$ ,  $c' = d$ ,  $d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	(b)	(c)	@	(1)
<b>a</b>	(a)		(1)			-
<b>b</b>	(b)	(1)				-
<b>c</b>	(c)			(0)	(1)	-
<b>d</b>	(d)			(1)		-
<b>1</b>	(1)	-	-	-	-	-

Relation no. 3:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1				1
<b>b</b>			1		1	1
<b>c</b>				1		1
<b>d</b>				1	1	1
<b>1</b>						1

Model scheme no. 6,  $a' = a$ ,  $b' = c$ ,  $c' = b$ ,  $d' = d$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	ⓑ	ⓒ	ⓓ	⓫
<b>a</b>	ⓐ	⓫				-
<b>b</b>	ⓑ			⓫	○	-
<b>c</b>	ⓒ		⓫			-
<b>d</b>	ⓓ		○		⓫	-
<b>1</b>	⓫	-	-	-	-	-

Relation no. 4:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1				1
<b>b</b>			1	1	1	1
<b>c</b>				1	1	1
<b>d</b>					1	1
<b>1</b>						1

Model scheme no. 7,  $a' = a$ ,  $b' = d$ ,  $c' = c$ ,  $d' = b$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	ⓑ	ⓒ	ⓓ	⓫
<b>a</b>	ⓐ	⓫				-
<b>b</b>	ⓑ		○	○	⓫	-
<b>c</b>	ⓒ		○	⓫		-
<b>d</b>	ⓓ		⓫			-
<b>1</b>	⓫	-	-	-	-	-

Relation no. 5:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1				1
<b>b</b>			1	1		1
<b>c</b>				1	1	1
<b>d</b>			1		1	1
<b>1</b>						1

Model scheme no. 8,  $a' = a$ ,  $b' = b$ ,  $c' = d$ ,  $d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	ⓑ	ⓒ	ⓓ	⓫
<b>a</b>	ⓐ	⓫				-
<b>b</b>	ⓑ		⓫		○	-
<b>c</b>	ⓒ			○	⓫	-
<b>d</b>	ⓓ		○	⓫		-
<b>1</b>	⓫	-	-	-	-	-

Relation no. 6:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1			1	1
<b>b</b>			1	1		1
<b>c</b>				1		1
<b>d</b>					1	1
<b>1</b>						1

Model scheme no. 9,  $a' = c$ ,  $b' = d$ ,  $c' = a$ ,  $d' = b$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	ⓑ	ⓒ	ⓓ	⓫
<b>a</b>	ⓐ		○	⓫		-
<b>b</b>	ⓑ	○			⓫	-
<b>c</b>	ⓒ	⓫				-
<b>d</b>	ⓓ		⓫			-
<b>1</b>	⓫	-	-	-	-	-

Model scheme no. 10,  $a' = d$ ,  $b' = c$ ,  $c' = b$ ,  $d' = a$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	ⓑ	ⓒ	ⓓ	⓫
<b>a</b>	ⓐ	○			⓫	-
<b>b</b>	ⓑ		○	⓫		-
<b>c</b>	ⓒ		⓫			-
<b>d</b>	ⓓ	⓫				-
<b>1</b>	⓫	-	-	-	-	-

Relation no. 7:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1			1	1
<b>b</b>			1	1	1	1
<b>c</b>				1		1
<b>d</b>					1	1
<b>1</b>						1

Model scheme no. 11,  $a' = c$ ,  $b' = d$ ,  $c' = a$ ,  $d' = b$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	ⓑ	ⓒ	ⓓ	⓫
<b>a</b>	ⓐ		○	⓫		-
<b>b</b>	ⓑ	○	○		⓫	-
<b>c</b>	ⓒ	⓫				-
<b>d</b>	ⓓ		⓫			-
<b>1</b>	⓫	-	-	-	-	-

Relation no. 8:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1			1	1
<b>b</b>			1	1		1
<b>c</b>				1		1
<b>d</b>			1		1	1
<b>1</b>						1

Model scheme no. 12,  $a' = c$ ,  $b' = d$ ,  $c' = a$ ,  $d' = b$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ		○	Ⓛ		-
<b>b</b>	Ⓟ	○			Ⓛ	-
<b>c</b>	ⓒ	Ⓛ				-
<b>d</b>	Ⓣ		Ⓛ		○	-
<b>1</b>	Ⓛ	-	-	-	-	-

Relation no. 9:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1		1	1	1
<b>b</b>			1	1	1	1
<b>c</b>				1		1
<b>d</b>					1	1
<b>1</b>						1

Model scheme no. 13,  $a' = c$ ,  $b' = d$ ,  $c' = a$ ,  $d' = b$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ	○	○	Ⓛ		-
<b>b</b>	Ⓟ	○	○		Ⓛ	-
<b>c</b>	ⓒ	Ⓛ				-
<b>d</b>	Ⓣ		Ⓛ			-
<b>1</b>	Ⓛ	-	-	-	-	-

Relation no. 10:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1		1	1	1
<b>b</b>			1	1		1
<b>c</b>				1		1
<b>d</b>			1		1	1
<b>1</b>						1



Model scheme no. 14,  $a' = c$ ,  $b' = d$ ,  $c' = a$ ,  $d' = b$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ	○	○	Ⓛ		-
<b>b</b>	Ⓟ	○			Ⓛ	-
<b>c</b>	ⓒ	Ⓛ				-
<b>d</b>	Ⓣ		Ⓟ		○	-
<b>1</b>	Ⓛ	-	-	-	-	-

Relation no. 11:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1		1	1	1
<b>b</b>			1			1
<b>c</b>			1	1		1
<b>d</b>			1		1	1
<b>1</b>						1

Model scheme no. 15,  $a' = b$ ,  $b' = a$ ,  $c' = d$ ,  $d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ		Ⓛ	○	○	-
<b>b</b>	Ⓟ	Ⓛ				-
<b>c</b>	ⓒ	○		Ⓛ		-
<b>d</b>	Ⓣ	○			Ⓛ	-
<b>1</b>	Ⓛ	-	-	-	-	-

Model scheme no. 16,  $a' = b$ ,  $b' = a$ ,  $c' = d$ ,  $d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ		Ⓛ	○	○	-
<b>b</b>	Ⓟ	Ⓛ				-
<b>c</b>	ⓒ	○			Ⓛ	-
<b>d</b>	Ⓣ	○		Ⓟ		-
<b>1</b>	Ⓛ	-	-	-	-	-

Relation no. 12:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1		1	1	1
<b>b</b>			1			1
<b>c</b>			1	1	1	1
<b>d</b>			1		1	1
<b>1</b>						1

Model scheme no. 17,  $a' = b, b' = a, c' = d, d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ		Ⓛ	○	○	-
<b>b</b>	Ⓟ	Ⓛ				-
<b>c</b>	ⓒ	○		○	Ⓛ	-
<b>d</b>	Ⓣ	○		Ⓛ		-
<b>1</b>	Ⓛ	-	-	-	-	-

Relation no. 13:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1		1		1
<b>b</b>			1	1		1
<b>c</b>				1	1	1
<b>d</b>		1	1		1	1
<b>1</b>						1

Model scheme no. 18,  $a' = a, b' = b, c' = d, d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ	Ⓛ			○	-
<b>b</b>	Ⓟ		Ⓛ		○	-
<b>c</b>	ⓒ			○	Ⓛ	-
<b>d</b>	Ⓣ	○	○	Ⓛ		-
<b>1</b>	Ⓛ	-	-	-	-	-

Model scheme no. 19,  $a' = b, b' = a, c' = d, d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ		Ⓛ		○	-
<b>b</b>	Ⓟ	Ⓛ			○	-
<b>c</b>	ⓒ			○	Ⓛ	-
<b>d</b>	Ⓣ	○	○	Ⓛ		-
<b>1</b>	Ⓛ	-	-	-	-	-

Relation no. 14:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1		1		1
<b>b</b>			1	1		1
<b>c</b>				1		1
<b>d</b>		1	1	1	1	1
<b>1</b>						1

Model scheme no. 20,  $a' = a, b' = b, c' = d, d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ	Ⓛ			○	-
<b>b</b>	Ⓟ		Ⓛ		○	-
<b>c</b>	ⓒ				Ⓛ	-
<b>d</b>	Ⓣ	○	○	Ⓛ	○	-
<b>1</b>	Ⓛ	-	-	-	-	-

Model scheme no. 21,  $a' = b, b' = a, c' = d, d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ		Ⓛ		○	-
<b>b</b>	Ⓟ	Ⓛ			○	-
<b>c</b>	ⓒ				Ⓛ	-
<b>d</b>	Ⓣ	○	○	Ⓛ	○	-
<b>1</b>	Ⓛ	-	-	-	-	-

Relation no. 15:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1		1		1
<b>b</b>			1		1	1
<b>c</b>			1	1		1
<b>d</b>		1			1	1
<b>1</b>						1

Model scheme no. 22,  $a' = a, b' = b, c' = d, d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ	Ⓛ			○	-
<b>b</b>	Ⓟ		Ⓛ	○		-
<b>c</b>	ⓒ		○		Ⓛ	-
<b>d</b>	Ⓣ	○		Ⓛ		-
<b>1</b>	Ⓛ	-	-	-	-	-

Model scheme no. 23,  $a' = c, b' = d, c' = a, d' = b$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	Ⓟ	ⓒ	Ⓣ	Ⓛ
<b>a</b>	Ⓣ	○		Ⓛ		-
<b>b</b>	Ⓟ		○		Ⓛ	-
<b>c</b>	ⓒ	Ⓛ			○	-
<b>d</b>	Ⓣ		Ⓛ	○		-
<b>1</b>	Ⓛ	-	-	-	-	-

Relation no. 16:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1		1		1
<b>b</b>			1		1	1
<b>c</b>			1	1	1	1
<b>d</b>		1			1	1
<b>1</b>						1

Model scheme no. 24,  $a' = a, b' = b, c' = d, d' = c$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	ⓑ	ⓒ	ⓓ	ⓔ
<b>a</b>	ⓐ	ⓑ			ⓓ	-
<b>b</b>	ⓑ		ⓑ	ⓓ		-
<b>c</b>	ⓒ		ⓐ	ⓓ	ⓔ	-
<b>d</b>	ⓓ	ⓐ		ⓑ		-
<b>1</b>	ⓔ	-	-	-	-	-

Relation no. 17:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1	1	1	1	1
<b>b</b>			1	1	1	1
<b>c</b>				1	1	1
<b>d</b>					1	1
<b>1</b>						1

Model scheme no. 25,  $a' = d, b' = c, c' = b, d' = a$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	ⓑ	ⓒ	ⓓ	ⓔ
<b>a</b>	ⓐ	ⓐ	ⓐ	ⓐ	ⓔ	-
<b>b</b>	ⓑ	ⓐ	ⓐ	ⓔ		-
<b>c</b>	ⓒ	ⓐ	ⓔ			-
<b>d</b>	ⓓ	ⓔ				-
<b>1</b>	ⓔ	-	-	-	-	-

Relation no. 18:

$\leq$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	1	1	1	1	1	1
<b>a</b>		1	1	1		1
<b>b</b>			1	1	1	1
<b>c</b>				1	1	1
<b>d</b>		1			1	1
<b>1</b>						1

Model scheme no. 26,  $a' = d$ ,  $b' = c$ ,  $c' = b$ ,  $d' = a$ :

$+_h$	<b>0</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>1</b>
<b>0</b>	{0}	@	b	c	d	1
<b>a</b>	@		○	○	1	-
<b>b</b>	b	○	○	1		-
<b>c</b>	c	○	1			-
<b>d</b>	d	1			○	-
<b>1</b>	1	-	-	-	-	-