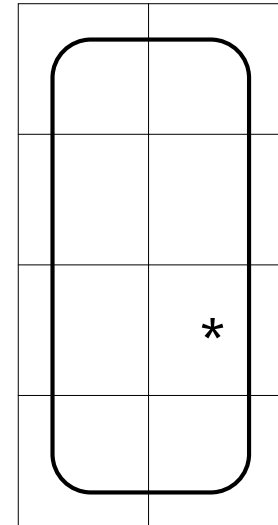
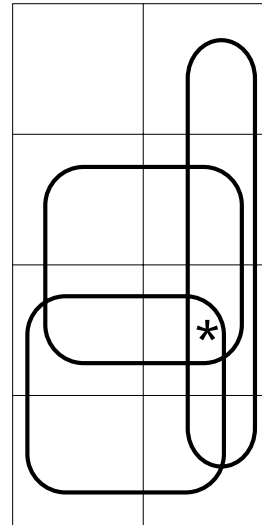
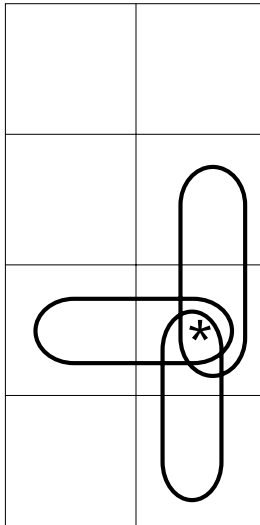

MAP-FACTORING METHOD

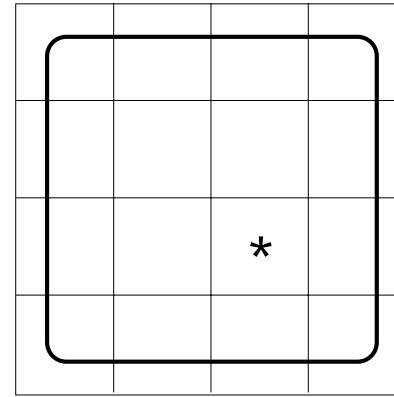
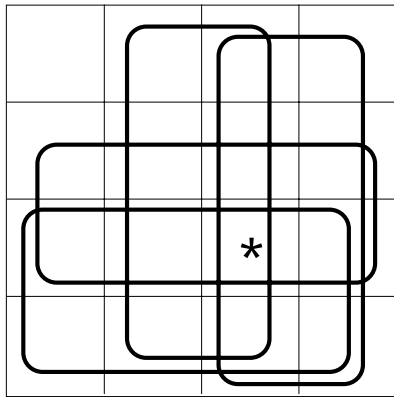
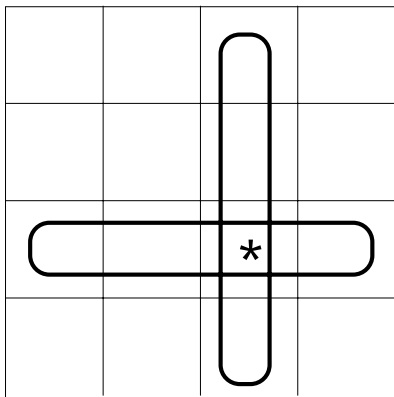
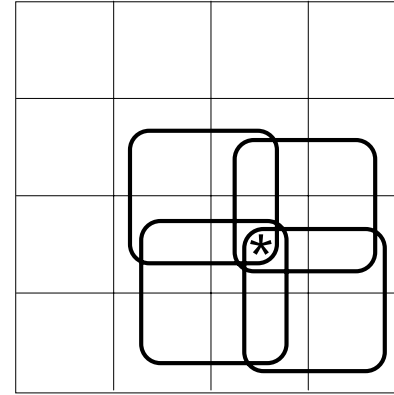
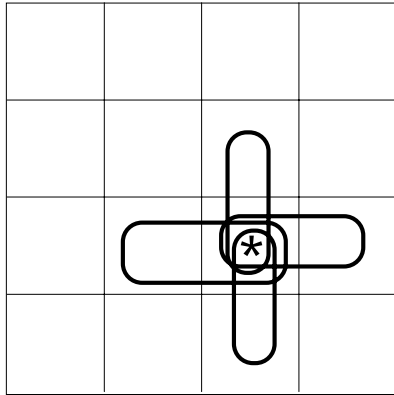
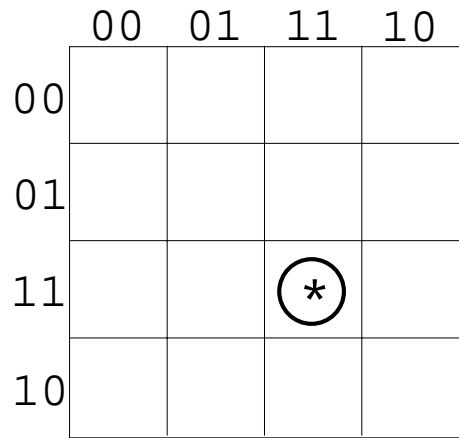
Somchai Prasitjutrakul

Permissible Loops

	0	1
00		
01		
11		*
10		

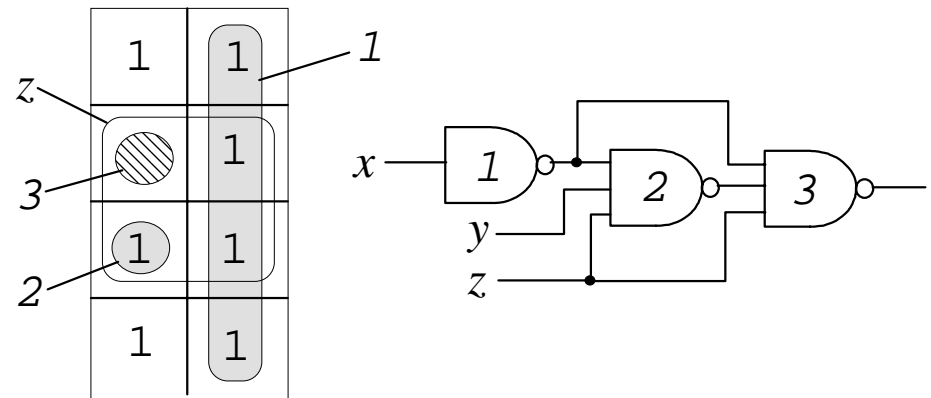
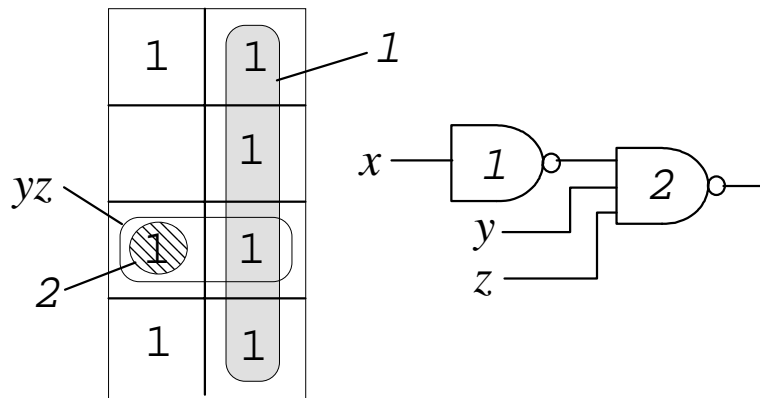
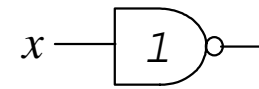
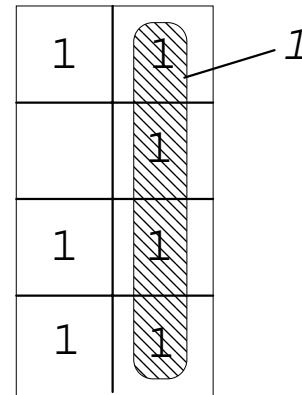


Permissible Loops



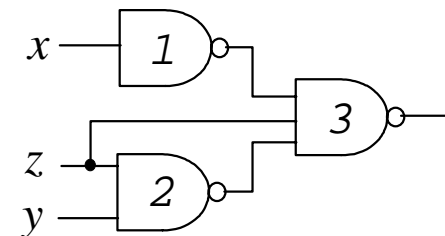
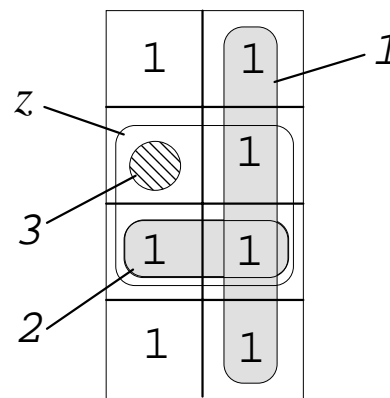
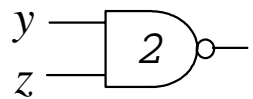
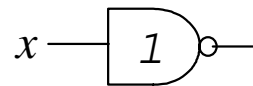
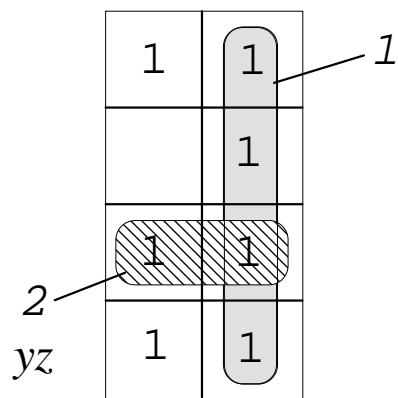
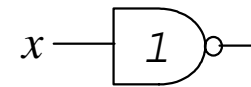
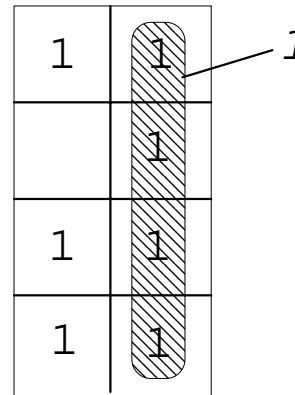
Example 1.1

	0	1	x
00	1	1	
01		1	
11	1	1	
10	1	1	



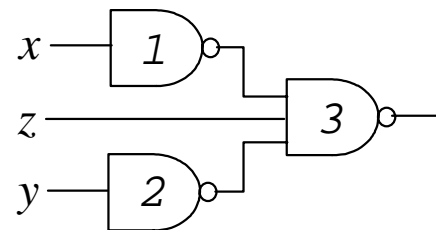
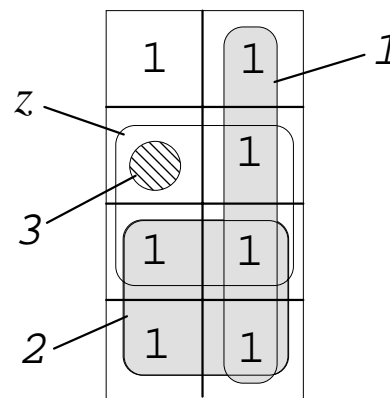
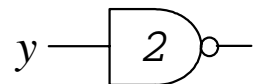
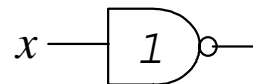
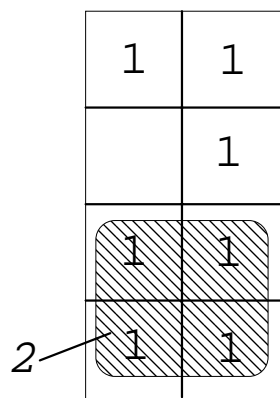
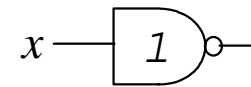
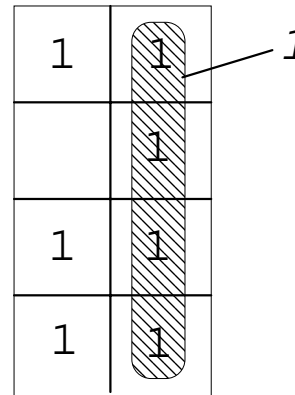
Example 1.2

	0	1	x
00	1	1	
01		1	
11	1	1	
10	1	1	



Example 1.3

	0	1	x
00	1	1	
01		1	
11	1	1	
10	1	1	



Example 2

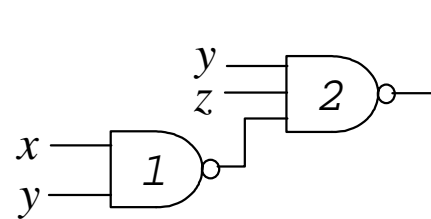
	0	1	x
00	1		
01	1	1	
11		1	
10	1	1	

1	
1	1
	1
1	1

Diagram of a 2-input AND gate with inputs x and y . The output is labeled xy . The gate is labeled with the number 1.

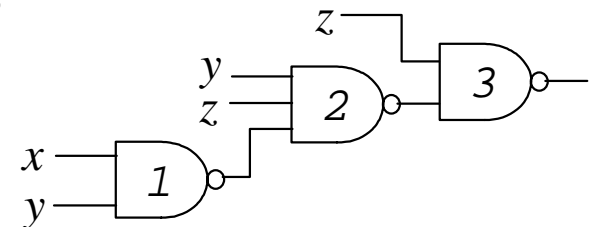
1	
1	1
2	1
1	1

Diagram of a 3-input AND gate with inputs x , y , and z . The output is labeled 2. The gate is labeled with the number 1. A shaded region in the Karnaugh map is labeled 2, and a shaded region in the adjacent Karnaugh map is labeled 1.

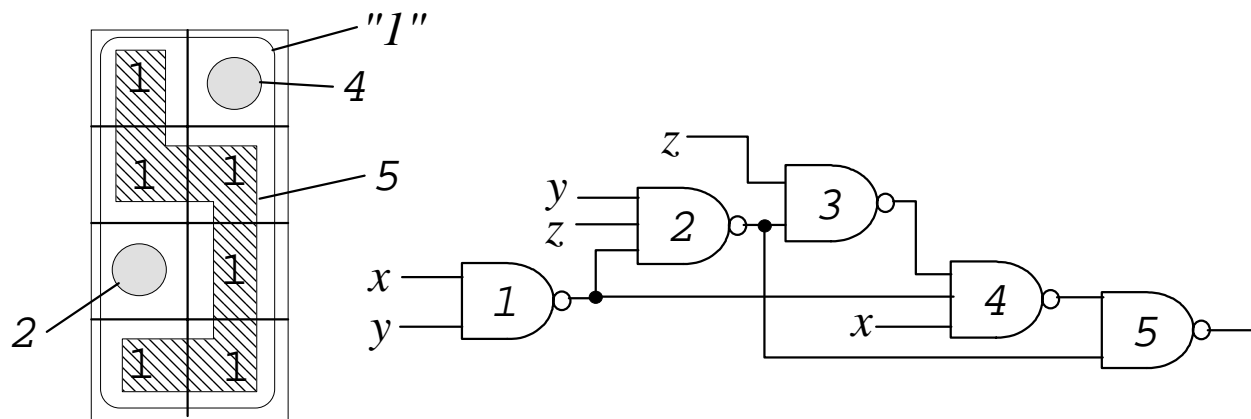
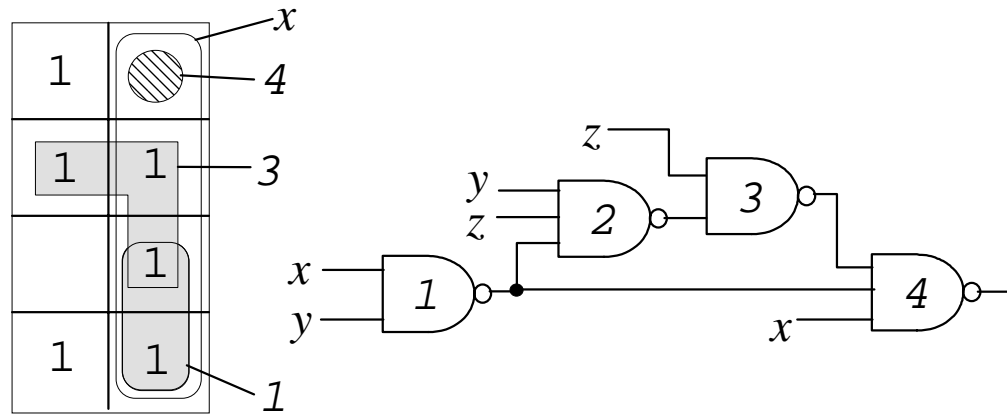


1	
2	3
2	z
1	1

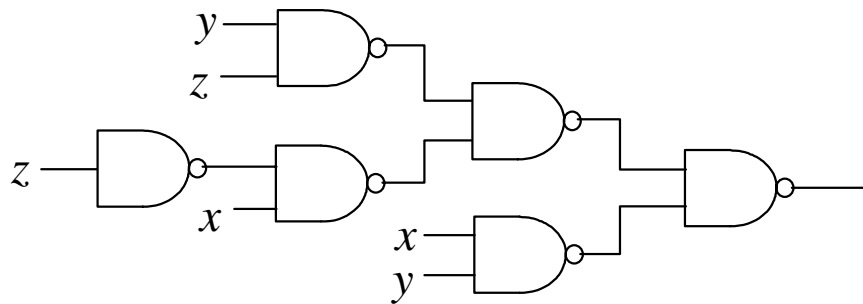
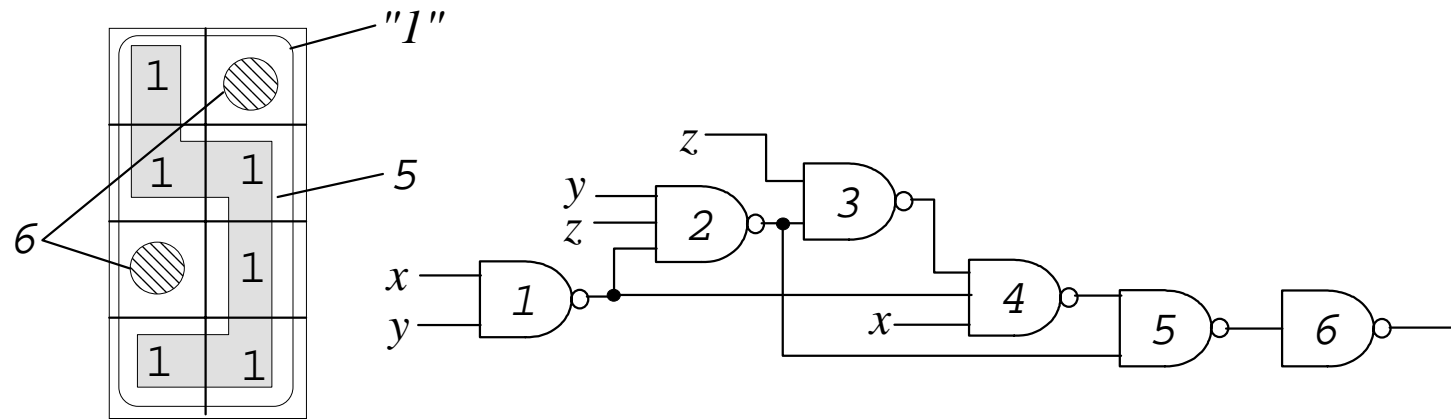
Diagram of a 3-input AND gate with inputs x , y , and z . The output is labeled 1. The gate is labeled with the number 1. A shaded region in the Karnaugh map is labeled 2, and a shaded region in the adjacent Karnaugh map is labeled 3.



Example 2

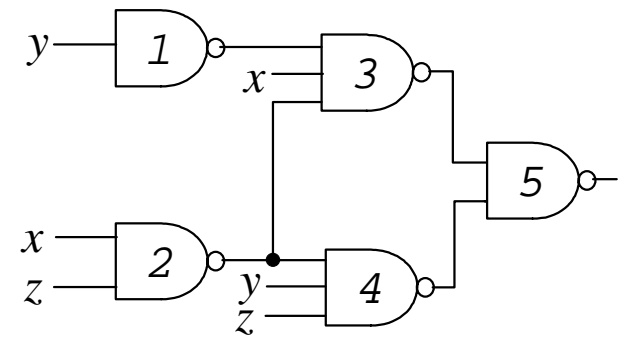
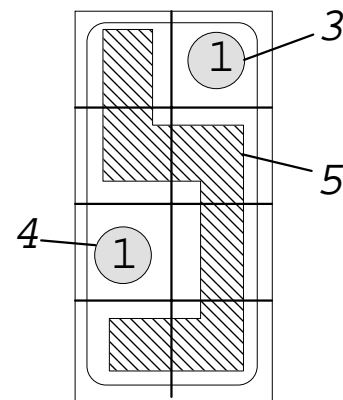
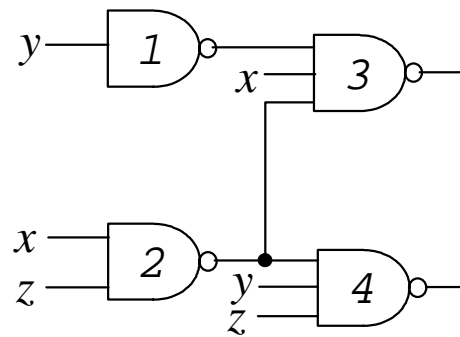
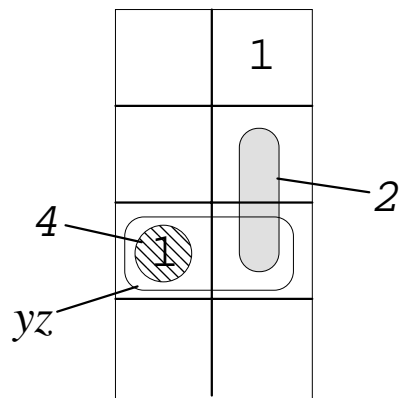
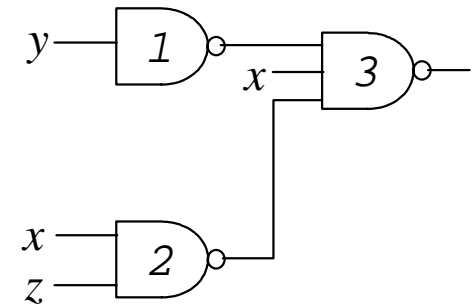
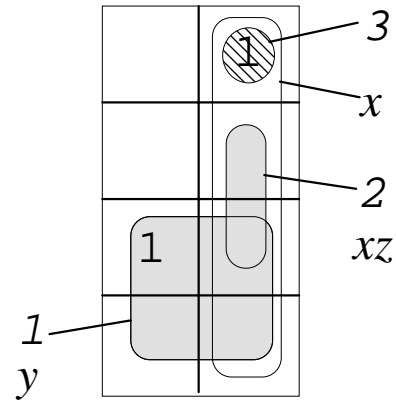


Example 2

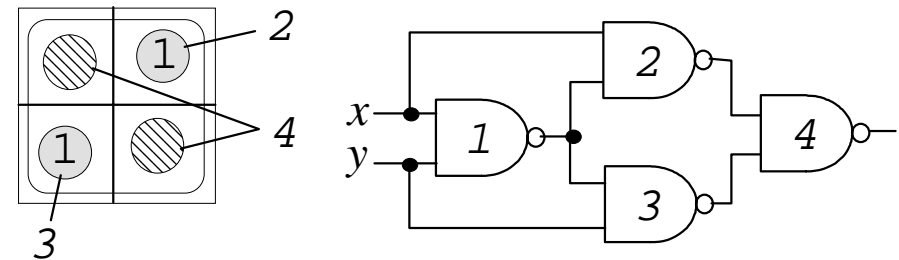
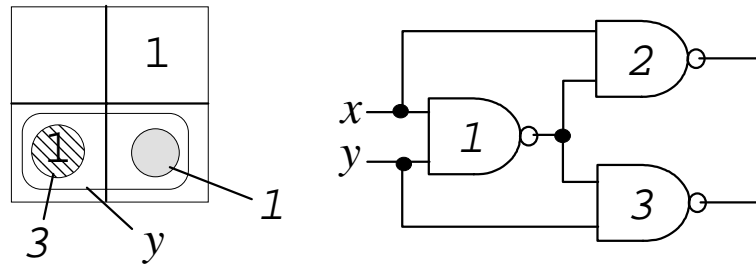
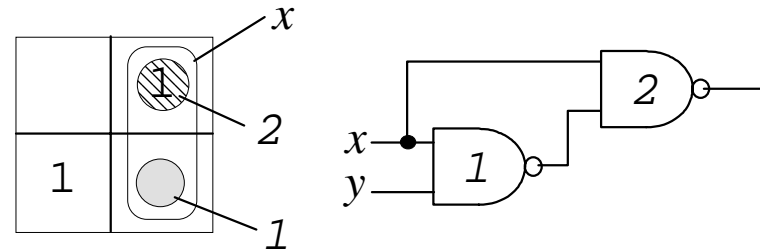
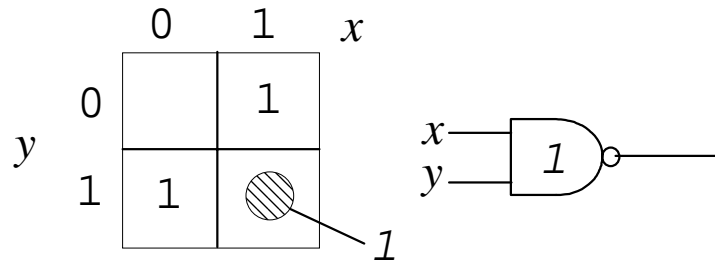


Example 3

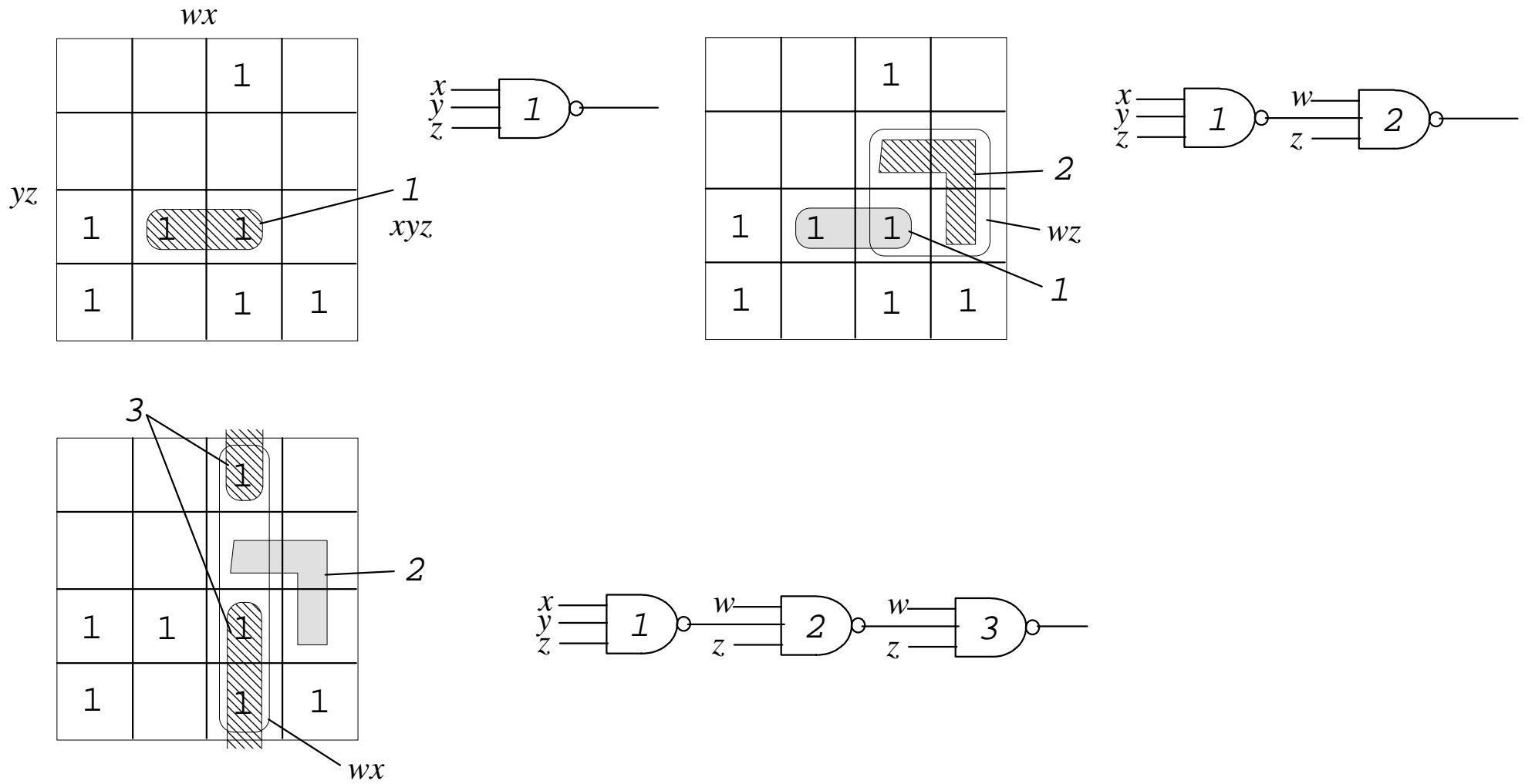
	0	1	x
00		1	
01			
11	1		
10			



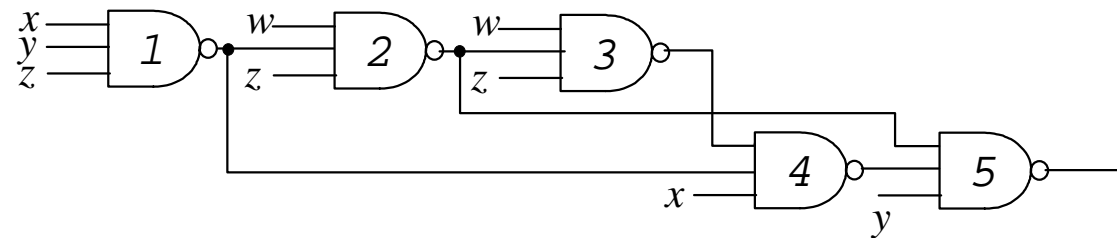
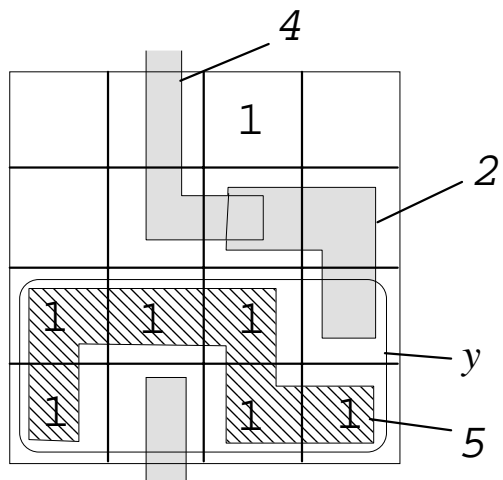
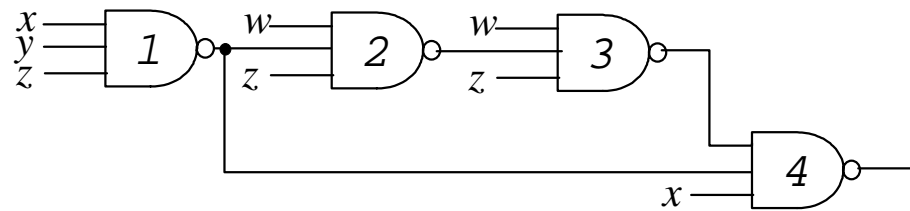
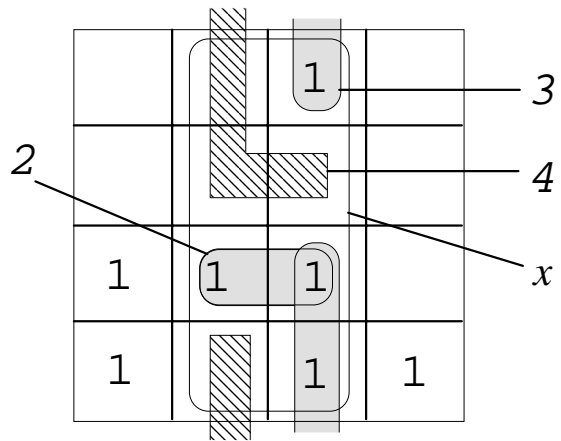
Example 4



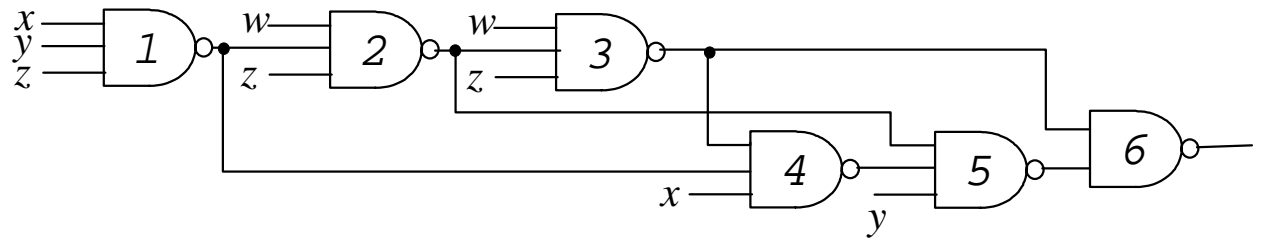
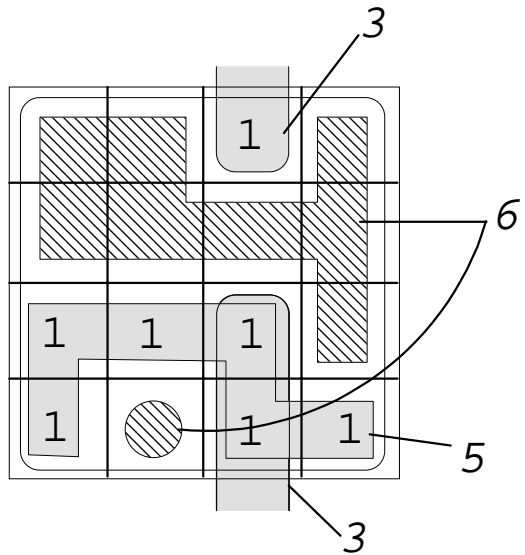
Example 5.1



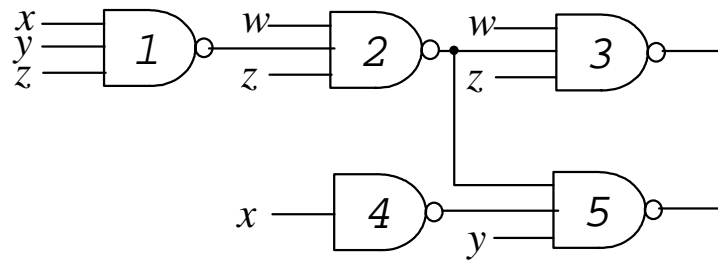
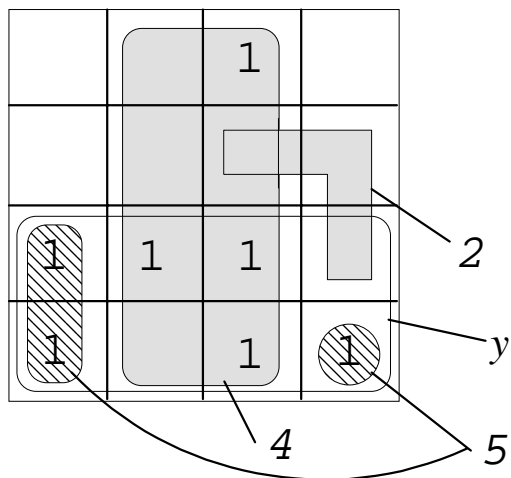
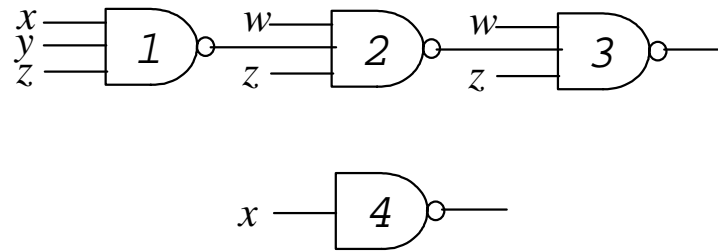
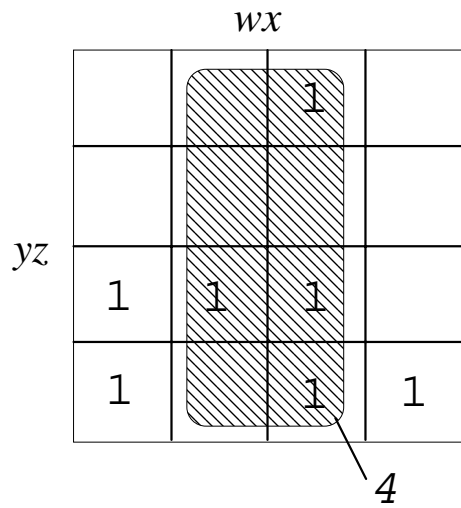
Example 5.1



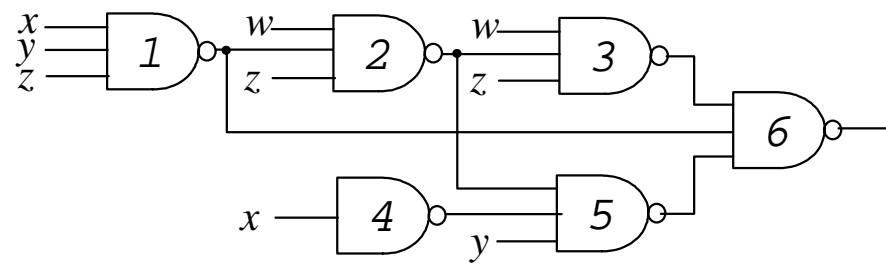
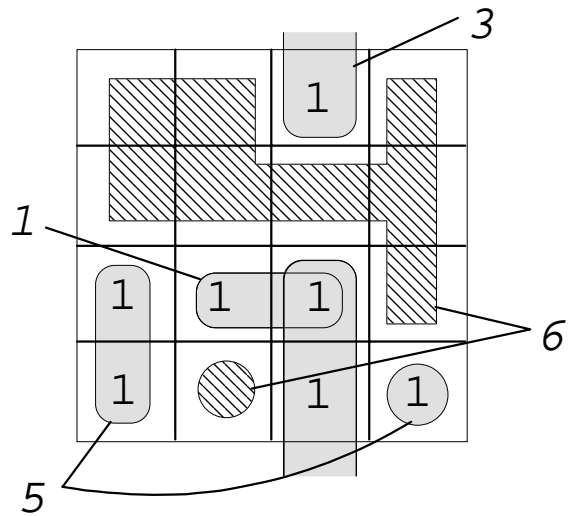
Example 5.1



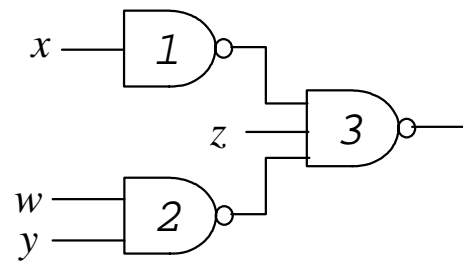
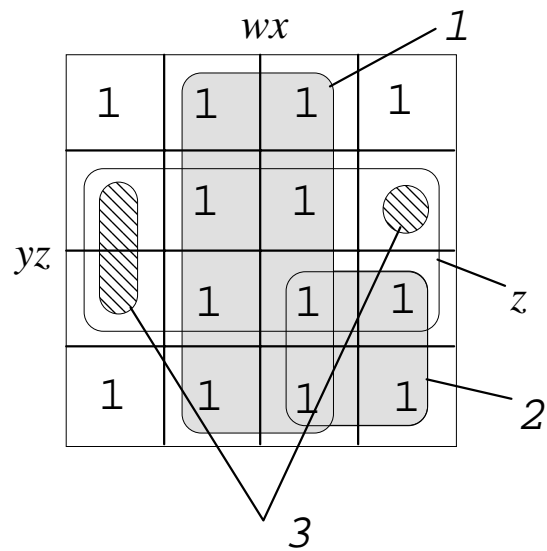
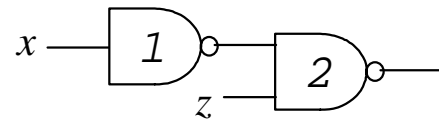
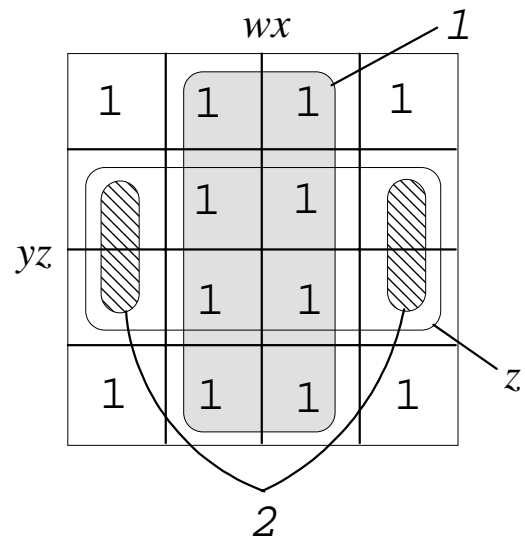
Example 5.2



Example 5.2



Example 6



Example 7

