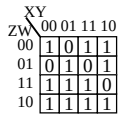
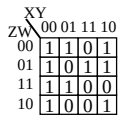
Karnaugh map for 7-segment display problem

XYZW	abcdefg
0000	1111110
0001	0110000
0010	1101101
0011	1111001
0100	0110011
0101	1011011
0110	1011111
0111	1110000
1000	1111111
1001	1111011
1010	1110111
1011	0011111
1100	1001110
1101	0111101
1110	1001111
1111	1000111



a=Y'W'+XW'+X'Z+YZ+X'YW+XY'Z'



b=Y'W'+X'Y'+XZ'W+X'ZW+X'Z'W'

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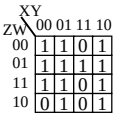
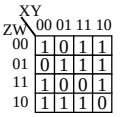
1010	1110111
1011	0011111
1100	1001110
1101	0111101
1110	1001111
1111	1000111



c=Y'Z'+X'W+X'Y+XY'+Z'W



d=X'Y'Z+Y'ZW+X'ZW'+XYW'+YZ'W+XY'Z'

Karnaugh map for 7-segment display problem

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1010	1110111
1011	0011111
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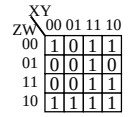
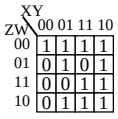
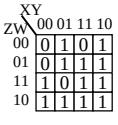
1110	1001111
1111	1000111



e=Y'W'+XW'+XY+XZ



f=Z'W'+XY'+XZ+YW'+X'YZ'



g=XY'+ZW'+XW+Y'Z+X'YZ'