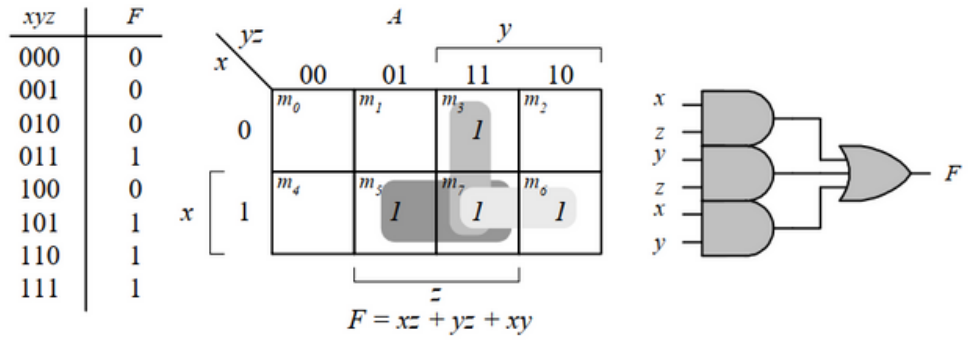
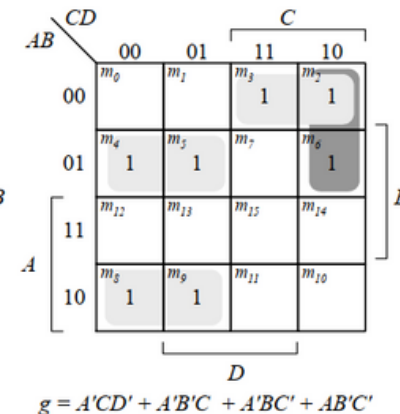
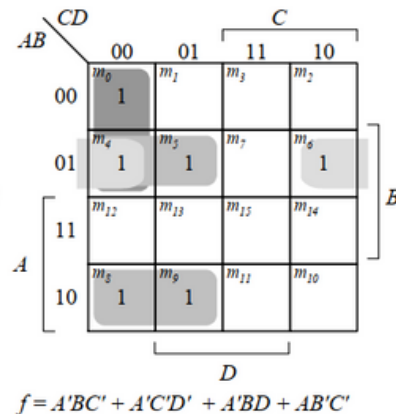
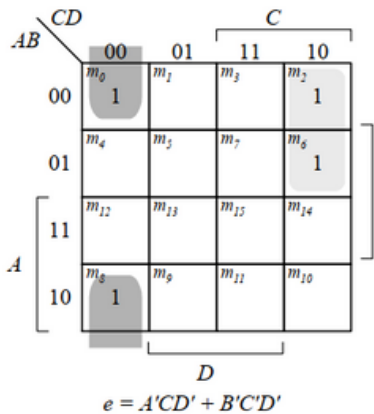
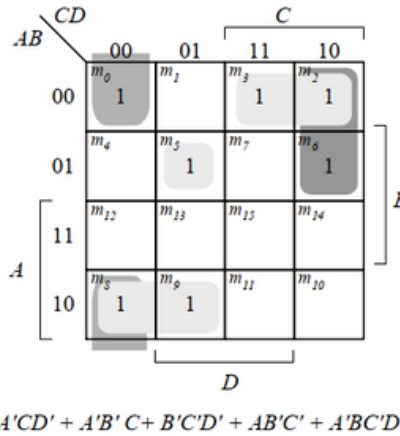
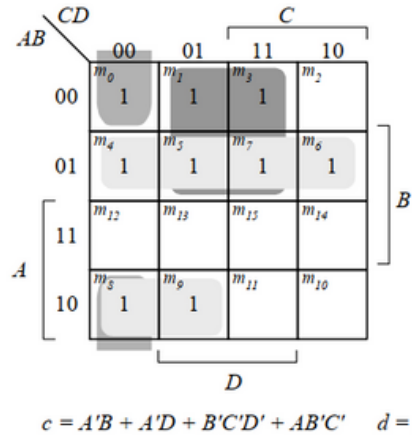
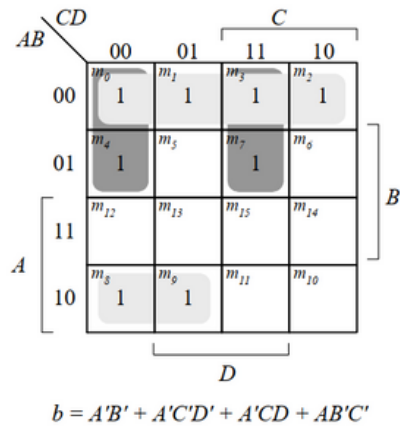
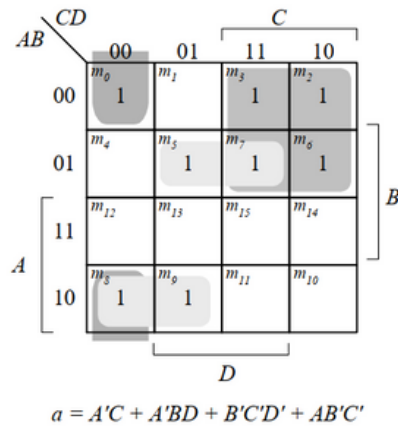


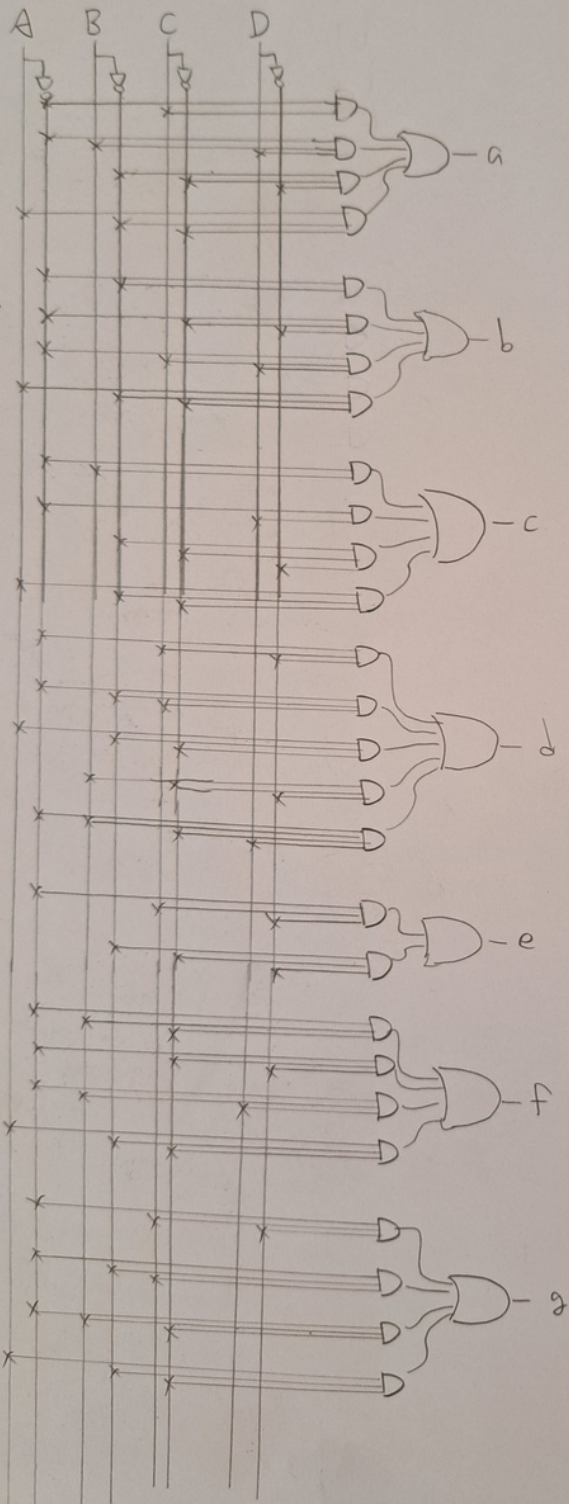
# 4.6



# 4.9

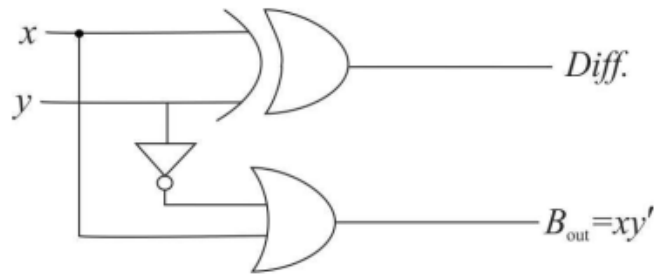
ABCD	a	b	c	d	e	f	g
0000	1	1	1	1	1	1	0
0001	0	1	1	0	0	0	0
0010	1	1	0	1	1	0	1
0011	1	1	1	1	0	0	1
0100	0	1	1	0	0	1	1
0101	1	0	1	1	0	1	1
0110	1	0	1	1	1	1	1
0111	1	1	1	0	0	0	0
1000	1	1	1	1	1	1	1
1001	1	1	1	1	0	1	1





4.12

$x$	$y$	$Diff.$	$Bout$
0	0	0	0
0	1	1	0
1	0	1	1
1	1	0	0



$$Diff. = x'y + xy'$$

$$= x \oplus y$$

$$Bout = xy'$$

$$Bout = \Sigma(1, 4, 5, 7)$$

$x$	$y$	$Bin$	$Diff.$	$Bout$
0	0	0	0	0
0	0	1	1	1
0	1	0	1	0
0	1	1	0	0
1	0	0	1	1
1	0	1	0	1
1	1	0	0	0
1	1	1	1	1

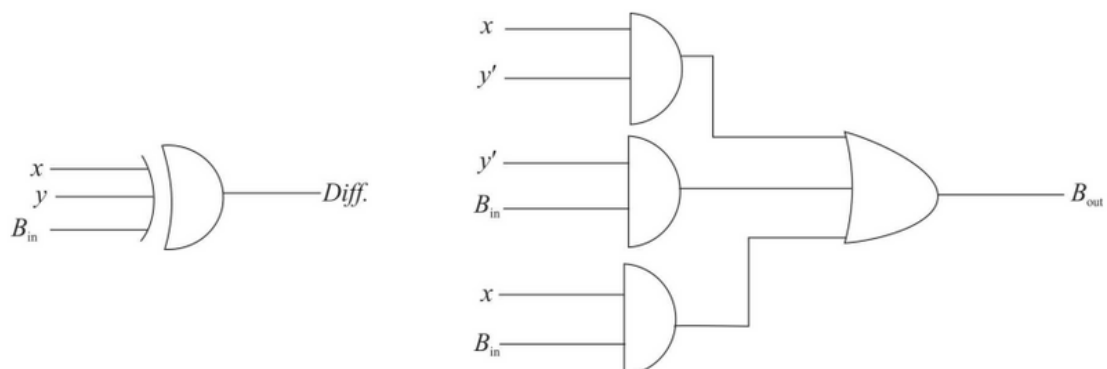
$x \backslash y$	00	01	11	10
0	0	1	0	0
1	1	1	1	0

$$Bout = xy' + y' Bin + x Bin$$

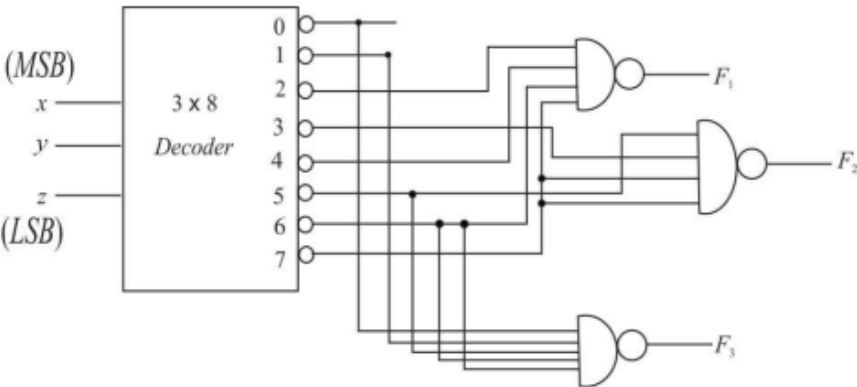
$$Diff. = x'(y \oplus Bin)$$

$$+ x(y \oplus Bin)$$

$$= x \oplus y \oplus Bin$$



4.28 (a)  $F_1 = xy + xz' + yz' = \Sigma(2, 4, 6, 7)$   
 $F_2 = xz + xy + yz = \Sigma(3, 5, 6, 7)$   
 $F_3 = y'z + x'y'z' + xy = \Sigma(0, 1, 5, 6, 7)$



4.35 (a)

Inputs ABCD	F
0000	0
0001	1 $AB = 00$
0010	0 $F = D$
0011	1
0100	1 $AB = 01$
0101	0 $F = C'D'$
0110	0 $= (C + D)'$
0111	0
1000	0
1001	0 $AB = 10$
1010	0 $F = CD$
1011	1
1100	1 $AB = 11$
1101	1 $F = 1$
1110	1
1111	1

