

4.9

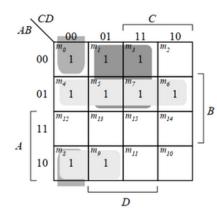
ABCD	a	b	с	d	e	f	g
0000	1	1	1	1	1	1	0
0001	0	1	1	0	0	0	0
0010	1	1	0	1	1	0	1
0011	1	1	1	1	0	0	1
0100	0	1	1	0	0	1	1
0101	1	0	1	1	0	1	1
0110	1	0	1	1	1	1	1
0111	1	1	1	0	0	0	0
1000	1	1	1	1	1	1	1
1001	1	1	1	1	0	1	1

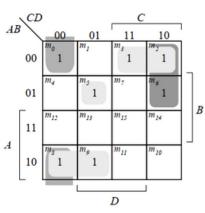
47	CD	1		C		1
AE	, /	_00_	01	11	10	
	00	1	$m_I$	m <sub>3</sub>	1	
	01	$m_4$	m <sub>5</sub>	1	<i>m</i> <sub>o</sub> 1	$ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $
,	11	$m_{12}$	m <sub>13</sub>	m <sub>15</sub>	$m_{I4}$	
A	10	m <sub>8</sub>	m <sub>9</sub> 1	$m_{II}$	m <sub>10</sub>	
				D		

	CD	)		C		,
AE	3 \	00	01	11	10	
	00	1	1	1	1	_
	01	1	$m_5$	1	m <sub>6</sub>	
,	11	$m_{12}$	$m_{13}$	$m_{IS}$	$m_{I4}$	
A	10	m <sub>s</sub> 1	m <sub>9</sub> 1	$m_{II}$	m <sub>10</sub>	
				D	J	

$$a = A'C + A'BD + B'C'D' + AB'C'$$

b = A'B' + A'C'D' + A'CD + AB'C'





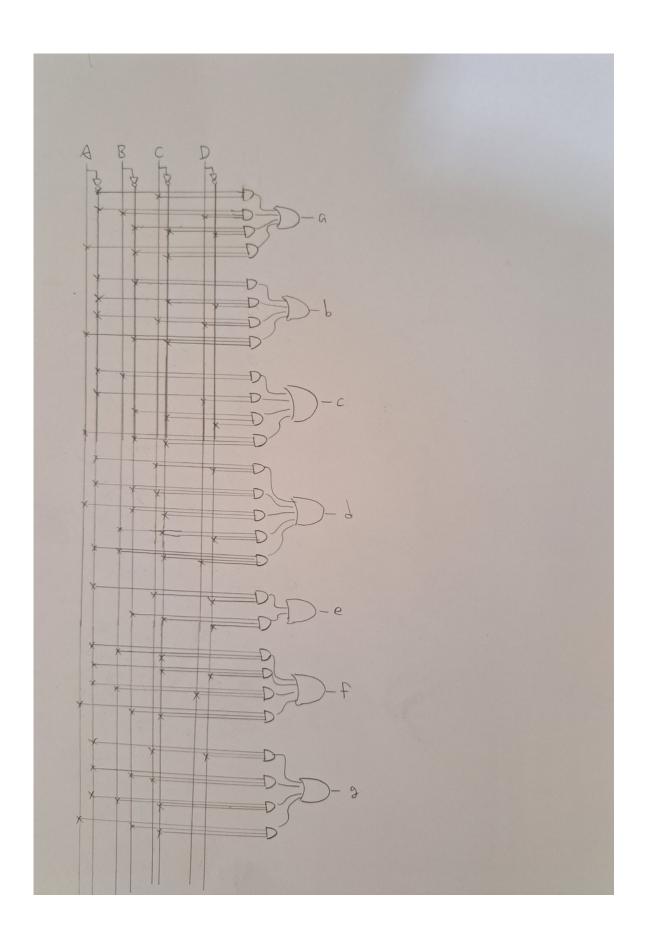
$$c = A'B + A'D + B'C'D' + AB'C' \qquad d = A'CD' + A'B'C + B'C'D' + AB'C' + A'BC'D$$

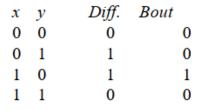
	\CD			C		
AB	/	00	01	11	10	
	00	1	$m_I$	$m_3$	1	_
	01	$m_4$	$m_5$	$m_7$	m <sub>6</sub>	
	11	$m_{12}$	$m_{13}$	$m_{15}$	$m_{I4}$	B
A	10	<i>m</i> <sub>ε</sub> 1	$m_g$	m <sub>11</sub>	m <sub>10</sub>	_
					I	
D						
e = A'CD' + B'C'D'						

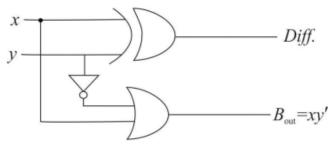
		CD					
	AB	/	00	01	11	10	1
		00	1	$m_I$	$m_{\tilde{g}}$	$m_2$	_
,		01	1	m <sub>5</sub>	m <sub>7</sub>	m <sub>6</sub>	
	,	11	m <sub>12</sub>	$m_{13}$	m <sub>15</sub>	$m_{I4}$	B
	A	10	m <sub>s</sub>	m <sub>9</sub>	m <sub>11</sub>	m <sub>20</sub>	
					D	J	

		CD	)		C		
	AB	1	00	01	11	10	
		00	$m_0$	$m_I$	m <sub>3</sub>	1	
<b>n</b>		01	m <sub>4</sub>	m <sub>5</sub>	$m_7$	m <sub>6</sub>	
В	,	11	$m_{12}$	$m_{13}$	m <sub>15</sub>	$m_{I4}$	B
	A	10	m <sub>S</sub>	m <sub>9</sub>	m <sub>21</sub>	m <sub>10</sub>	
		_				J	
					D		
		- 41	CODI .	AIDIO .	UDO	1010	

 $g = A'CD' + A'B'C \ + A'BC' + AB'C'$ 







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

$$= x \oplus y$$

$$Bout = xy'$$

x	$\boldsymbol{y}$	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

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

$x^{y}$	00	01	11	10
0	0	1	0	0
1	1	1	1	0

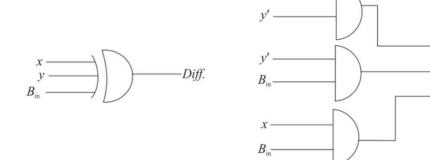
Bout = xy' + y'Bin + xBin

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

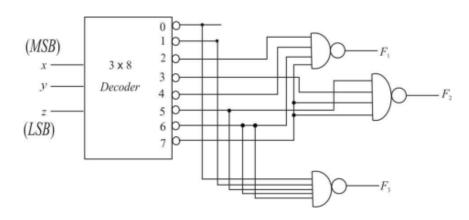
$$+x(y \oplus Bin)$$

 $-B_{\text{out}}$ 

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



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)

