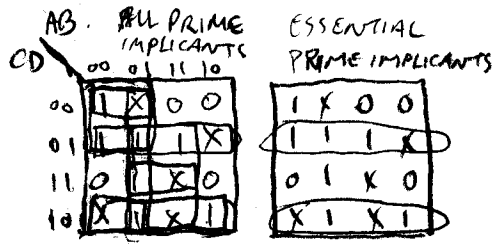
7.8)



7.9)

$A'C' + C'D + BD + CD'$

$A'C' + C'D + BC + CD'$

7.11)

6.) 1, 2, 5, 7, 8, 9

7.) 1, 2, 4, 5, 6, 7, 8, 9, 11

HW #3

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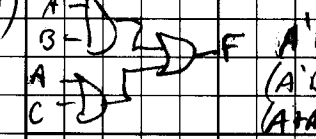
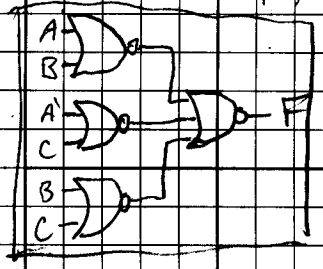
6.1)



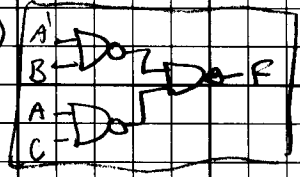
$A'B + AC$

$(A'B+A)(A'B+C)$

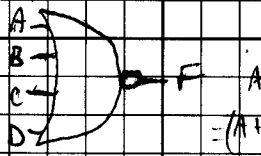
$(A+A')(A+B)(A'+C)(B+C)$



6.2)



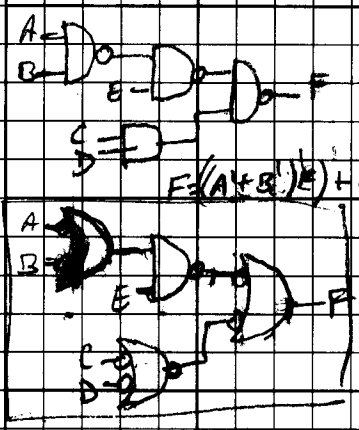
6.5)



$A'B'C'D' = F$

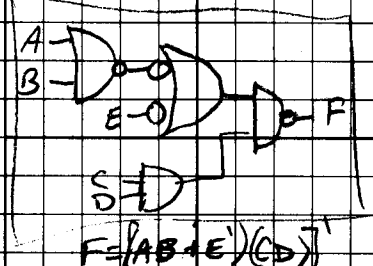
$=(A+B+C+D)' = F$

6.7)



$F = (A+B')E + C' + D'$

6.8)



$F = [(AB+E')(CD)]'$

6.9)

$(AB+E')(CD)' = [((A'+B')E)+C'+D']$

$(AB+E')+(CD)' =$

$(AB)'E + C' + D'$

$[(A+B')E + C' + D' =$

7.1) $AC + A'B + BC = AC + A'B$

A \ BC	00	01	11	10
0	0	0	1	1
1	0	1	1	0

$AC + A'B$

YES IT HELPS

7.2)

CD \ AB	00	01	11	10
00	0	1	0	1
01	1	0	0	0
11	0	0	0	0
10	1	0	0	0

$A'B'C'D' + A'BC'D' + AB'C'D' + AB'C'D$

YES

7.4)

CD \ AB	00	01	11	10
00	1	0	0	1
01	0	1	1	0
11	0	1	1	0
10	1	0	0	1

$BD + AB'D' + B'CD'$

7.5)

CD \ AB	00	01	11	10
00	0	1	1	0
01	1	0	0	1
11	1	0	0	1
10	0	1	1	0

$F' = (BD' + B'D)'$

$(BD')'(B'D)'$

$(B'+D)(B+D')$

7.6)

CD \ AB	00	01	11	10
00	1	1	0	1
01	1	1	1	1
11	1	1	1	1
10	1	1	0	0

$F =$

$A' + AD + AB'C'$

$D + A'D' + AB'C'$

$A' + AD + B'C'D'$

$D + A'D' + B'C'D'$

7.7)

CD \ AB	00	01	11	10
00	0	0	1	0
01	0	0	0	0
11	0	0	0	0
10	0	0	1	0

$F' =$

$(ACD' + ABD')'$

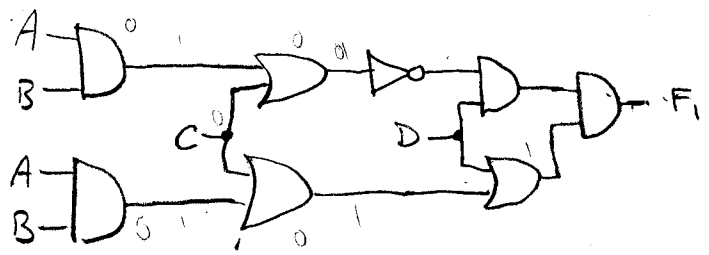
$(ACD)'(ABD')'$

$(A'+C'+D)(A'+B'+D)$

LAB #2 CAD

Ty Madsen
ECEN 220

1)



$((AB+C)'D)((AB+C)+D)$

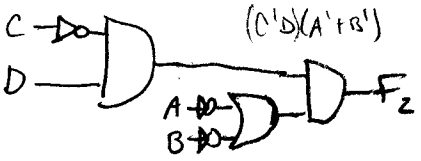
A	B	C	D	F_1	F_2	
0	0	0	0	0	0	✓
0	0	0	1	1	1	✓
0	0	1	0	0	0	✓
0	0	1	1	0	0	✓
0	1	0	0	0	0	✓
0	1	0	1	1	1	✓
0	1	1	0	0	0	✓
0	1	1	1	0	0	✓
1	0	0	0	0	0	✓
1	0	0	1	1	1	✓
1	0	1	0	0	0	✓
1	0	1	1	0	0	✓
1	1	0	0	0	0	✓
1	1	0	1	0	0	✓
1	1	1	0	0	0	✓
1	1	1	1	0	0	✓

CD \ AB	00	01	11	10
00	0	0	0	0
01	1	1	0	1
11	0	0	0	0
10	0	0	0	0

$A'C'D + AB'C'D = (C'D)(A'+B')$

$C'D(A'+AB')$ $C'D(A'+A)(A'+B')$

$(C'D)(A'+B')$



2) $(A+B+C)(A+C+D)(A'+B'+C')(A'+C'+D')$

CD \ AB	00	01	11	10
00	0	0	1	1
01	0	0	1	1
11	1	1	0	0
10	1	1	0	0

$A'C + AC' + A'BD + AB'D'$

A	B	C	D	F_1	F_2	
0	0	0	0	0	0	✓
0	0	0	1	0	0	✓
0	0	1	0	1	1	✓
0	0	1	1	1	1	✓
0	1	0	0	0	0	✓
0	1	0	1	1	1	✓
0	1	1	0	1	1	✓
0	1	1	1	1	1	✓
1	0	0	0	1	1	✓
1	0	0	1	1	1	✓
1	0	1	0	1	1	✓
1	0	1	1	0	0	✓
1	1	0	0	1	1	✓
1	1	0	1	1	1	✓
1	1	1	0	0	0	✓
1	1	1	1	0	0	✓