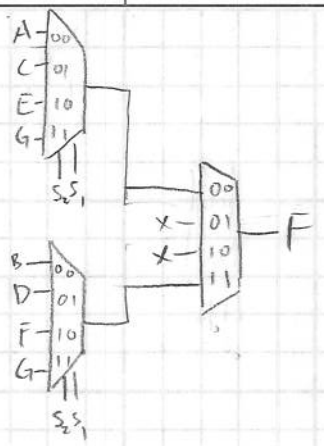
ECEn 220 HW4 | 8.1, 2, 3, 4, 6, 8, 10 | Benjamin Bergeson

3-0235 — 50 SHEETS — 5 SQUARES
3-0236 — 100 SHEETS — 5 SQUARES
3-0237 — 200 SHEETS — 5 SQUARES
3-0137 — 200 SHEETS — FILLER
COMET

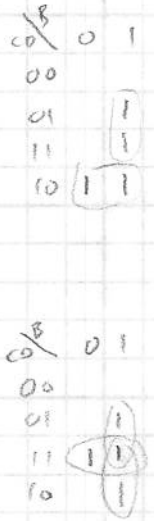
8.1

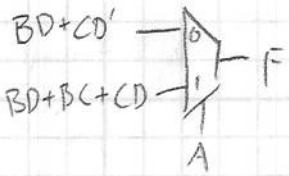
S_2	S_1	S_0	F
0	0	0	A
0	0	1	B
0	1	0	C
0	1	1	D
1	0	0	E
1	0	1	F
1	1	0	G
1	1	1	H



8.2

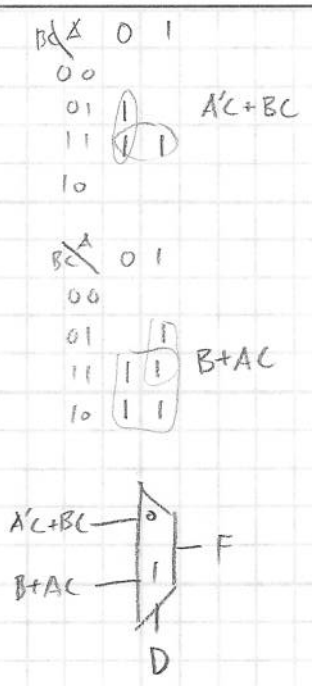
A	B	C	D	F
0	0	0	0	
0	0	0	1	
0	0	1	0	1
0	0	1	1	
0	1	0	0	
0	1	0	1	1
0	1	1	0	1
0	1	1	1	1
1	0	0	0	
1	0	0	1	
1	0	1	0	
1	0	1	1	1
1	1	0	0	
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1





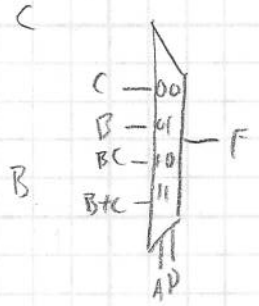
8.3

D	A	B	C	F
0	0	0	0	
0	0	0	1	1
0	0	1	0	
0	0	1	1	1
0	1	0	0	
0	1	0	1	
0	1	1	0	
0	1	1	1	1
1	0	0	0	
1	0	0	1	
1	0	1	0	1
1	0	1	1	1
1	1	0	0	
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1

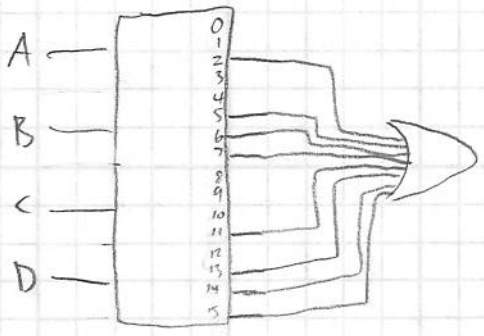


8.4

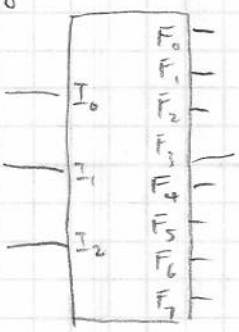
A	D	B	C	F
0	0	0	0	
0	0	0	1	1
0	0	1	0	
0	0	1	1	1
0	1	0	0	
0	1	0	1	
0	1	1	0	1
0	1	1	1	1
1	0	0	0	
1	0	0	1	
1	0	1	0	
1	0	1	1	1
1	1	0	0	
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1

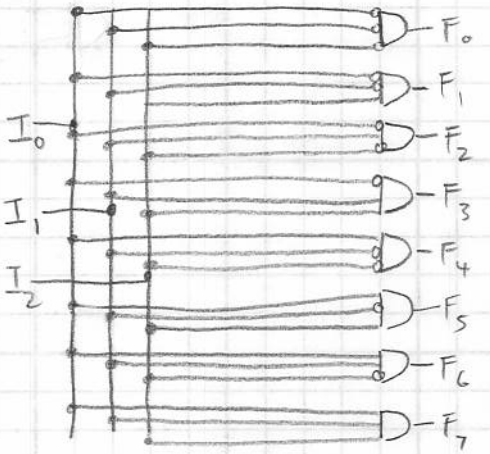


8.6



8.8





Problems from ROM lecture

1) 7 input 5 output

$2^7 \cdot 5 = 640$ bit

2) 22 input 8 output

$2^{22} \cdot 8 = 33554432$

8.10