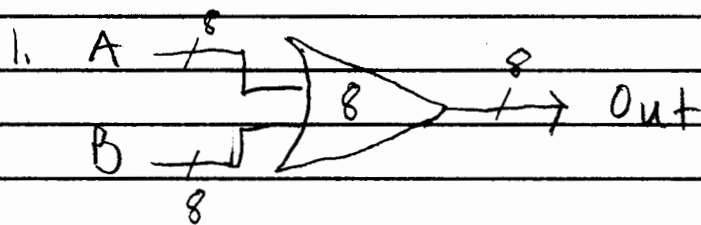
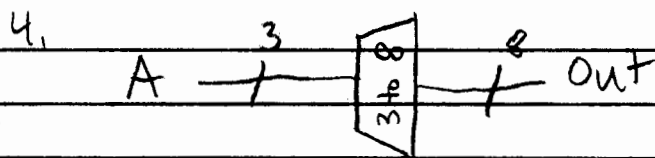


Asn 3

andbra16
Brandon Anderson

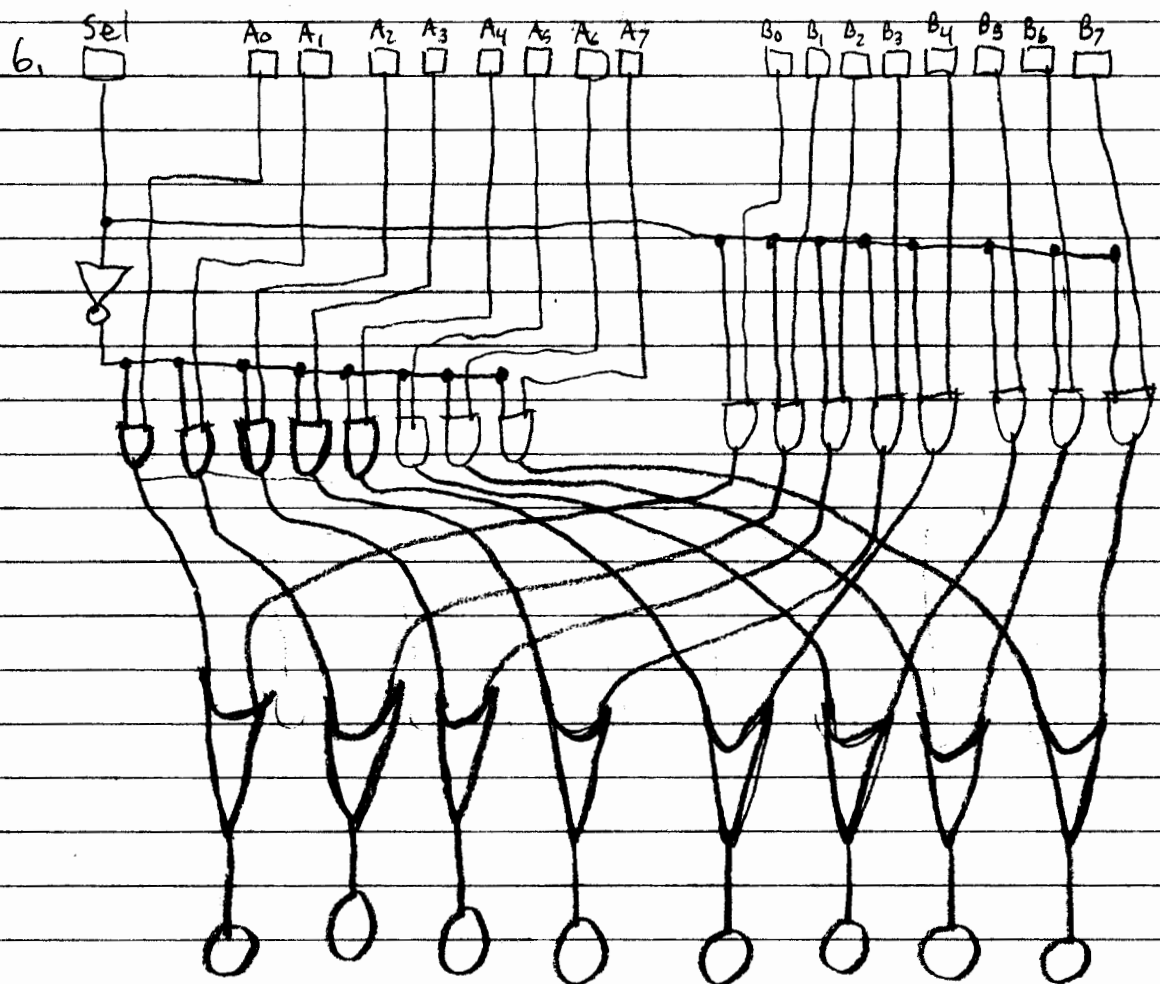


2.	K	$(K+1) \bmod 2^4$	3.	Input	Output
	0000	0001		0000	0001
	0001	0010		0001	0010
	0010	0011		0010	0011
	0011	0100		0011	0100
	0100	0101		0100	0101
	0101	0110		0101	0110
	0110	0111		0110	0111
	0111	1000		0111	1000
	1000	1001		1000	1001
	1001	1010		1001	1010
	1010	1011		1010	1011
	1011	1100		1011	1100
	1100	1101		1100	1101
	1101	1110		1101	1110
	1110	1111		1110	1111
	1111	0000		1111	0000



S, A | Out [7:0]

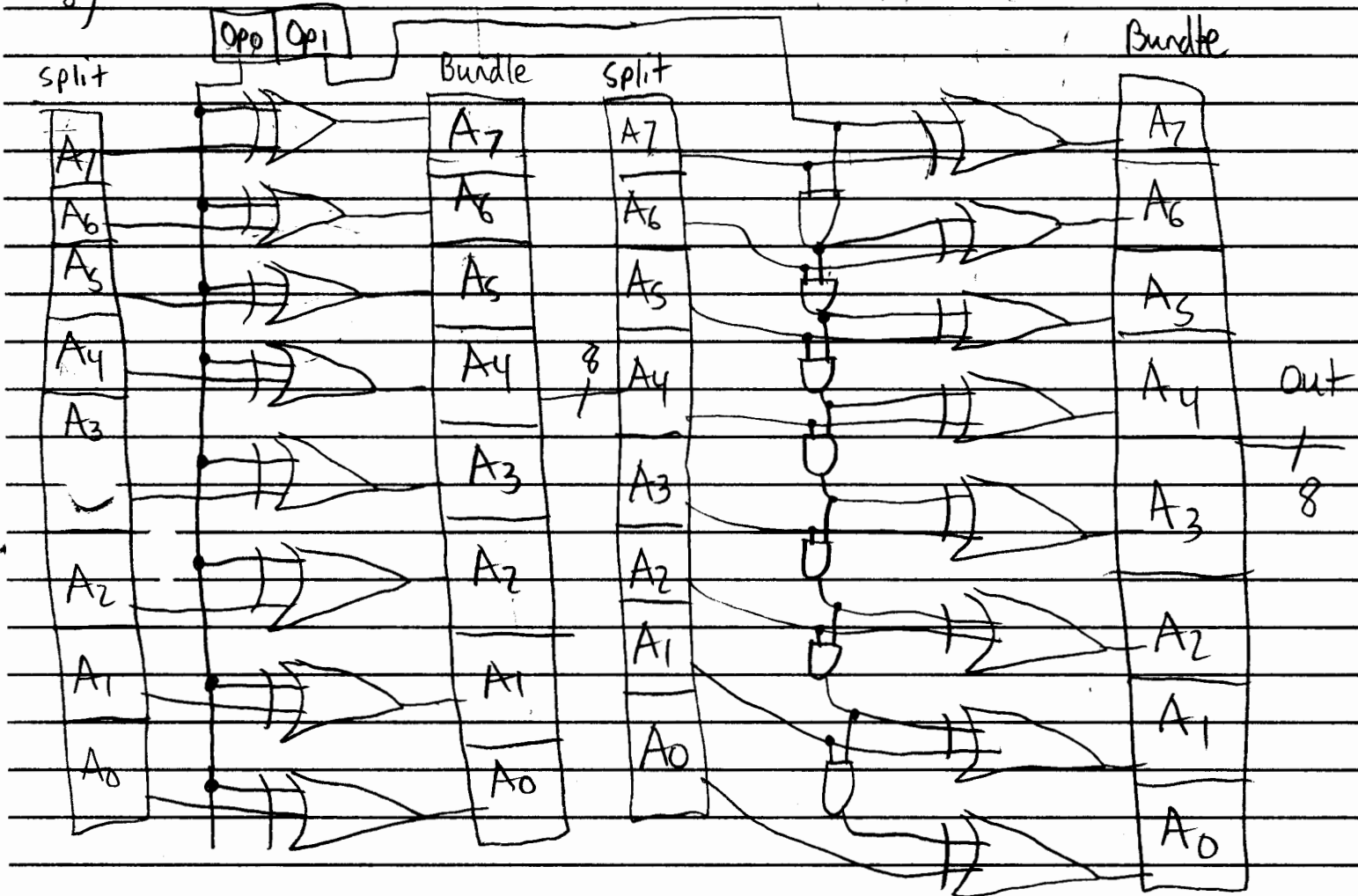
0	1000 0000
1	0100 0000
2	0010 0000
3	0001 0000
4	0000 1000
5	0000 0100
6	0000 0010
7	0000 0001



A	B	sel	Out
A	B	0	A
A	B	1	B

7. a) 1011 0111
 b) 1011 1000
 c) 0100 0111
 d) 0100 1000

8)



$$9) (Op_0 \oplus A_7 \text{ through } A_0) + (Op_1 \oplus A_7 \cdot Op_1 \cdot A_7 \oplus A_6 \cdot A_6 \cdot Op_1 \cdot A_7 \oplus A_5 \cdot A_5 \cdot Op_1 \cdot A_7 \oplus A_4 \cdot A_4 \cdot Op_1 \cdot A_7 \oplus A_3 \cdot A_3 \cdot Op_1 \cdot A_7 \oplus A_2 \cdot A_2 \cdot Op_1 \cdot A_7 \oplus A_1 \cdot A_1 \cdot Op_1 \cdot A_7 \oplus A_0 \cdot A_0 \cdot Op_1 \cdot A_7)$$

10/ 2 selector bits

A	B	C	sel	Output
A	B	C	00	A
A	B	C	01	B
A	B	C	10	C
A	B	C	11	undefined

11/ 3 selector bits

A 3 to 8 decoder