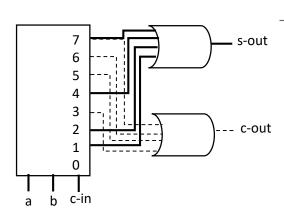
BLG231 Digital Circuits HW4

Yunus Güngör-No:150150701-CRN:11918

1)



Truth table for decoder

Truth table for decoder

full adder

S2	S ₁	So	07	O_6	05	O_4	O_3	O ₂	01	Oo	a	b	Cin	Cout	S
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	1
0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	1
0	1	1	0	0	0	0	1	0	0	0	0	1	1	1	0
1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1
1	0	1	0	0	1	0	0	0	0	0	1	0	1	1	0
1	1	0	0	1	0	0	0	0	0	0	1	1	0	1	0
1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1

$$s = O_7 + O_4 + O_2 + O_1$$

$$c = O_7 + O_6 + O_5 + O_3$$

2)

