Lab 1

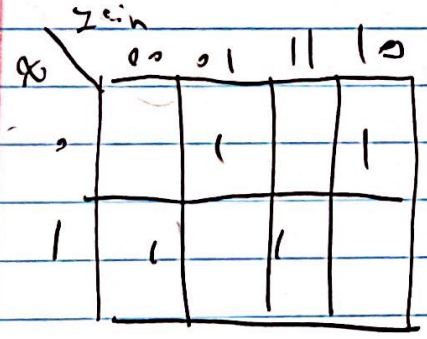
Full adder

x	y	Cin	C	S
0	0	0	0	0
0	0	1	0	1
0	1	0	0	1
0	1	1	1	0
1	0	0	0	1
1	0	1	1	0
1	1	0	1	0
1	1	1	1	1

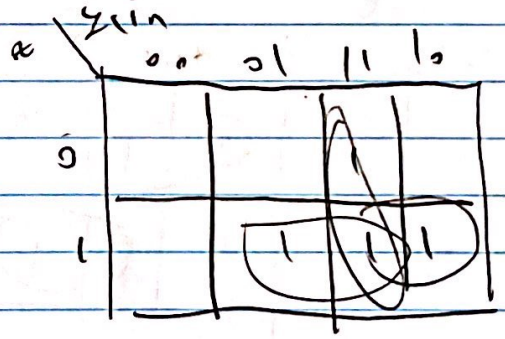
$C = m_3 + m_5 + m_6 + m_7$

$S = m_1 + m_2 + m_4 + m_7$

S



Cout



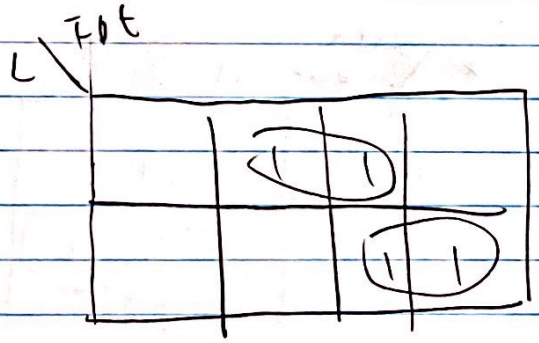
$S = x'y'C_{in} + x'yC_{in}' + xy'C_{in}' + xyC_{in}$

$C_{out} = xy + xC_{in} + yC_{in}$

Scanned with CamScanner

R/W

	(L) load	(I) input	Dt	Dt+1
read	0	0	0	0
	0	0	1	1
	0	1	0	0
	0	1	1	1
write	1	0	0	0
	1	0	1	0
	1	1	0	1
	1	1	1	1



$D_{t+1} = I D_t + L I$

equation into DFF

Scanned with CamScanner