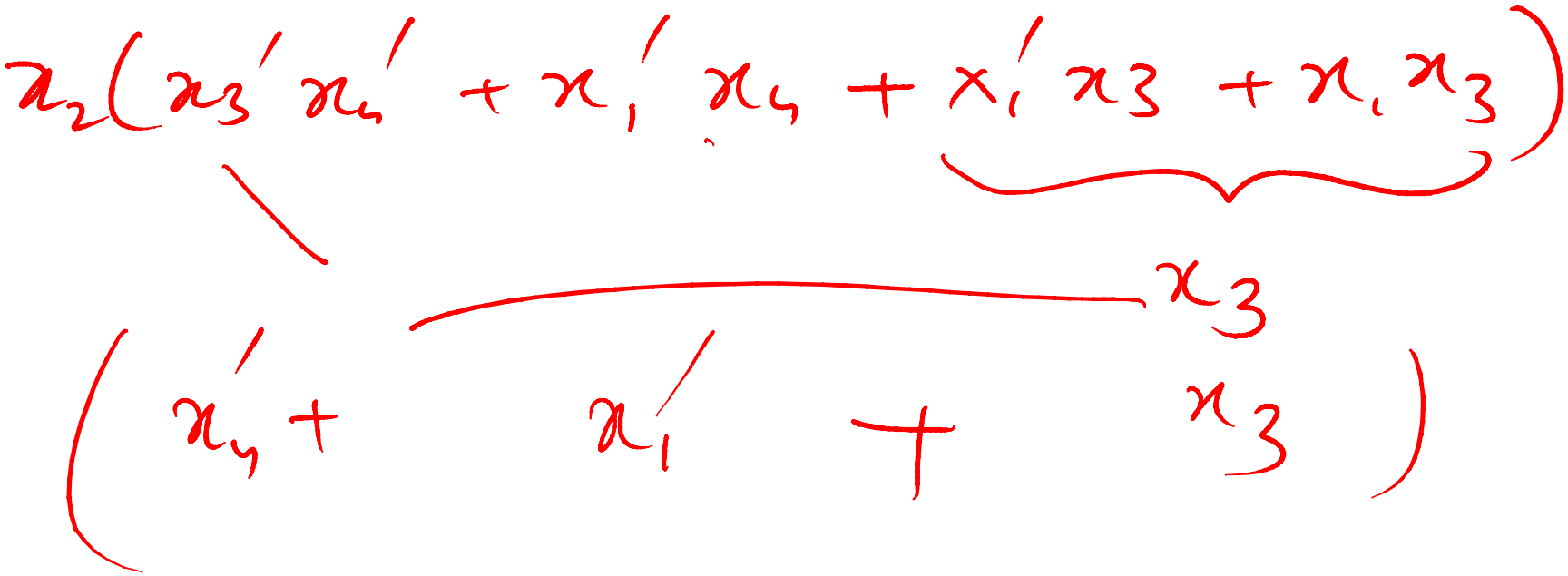
Prove a boolean equality (2.48)

Friday, August 25, 2017
8:45 PM

x2 x3'x4' + x1'x2 x4 + x1'x2 x3 + x1 x2 x3

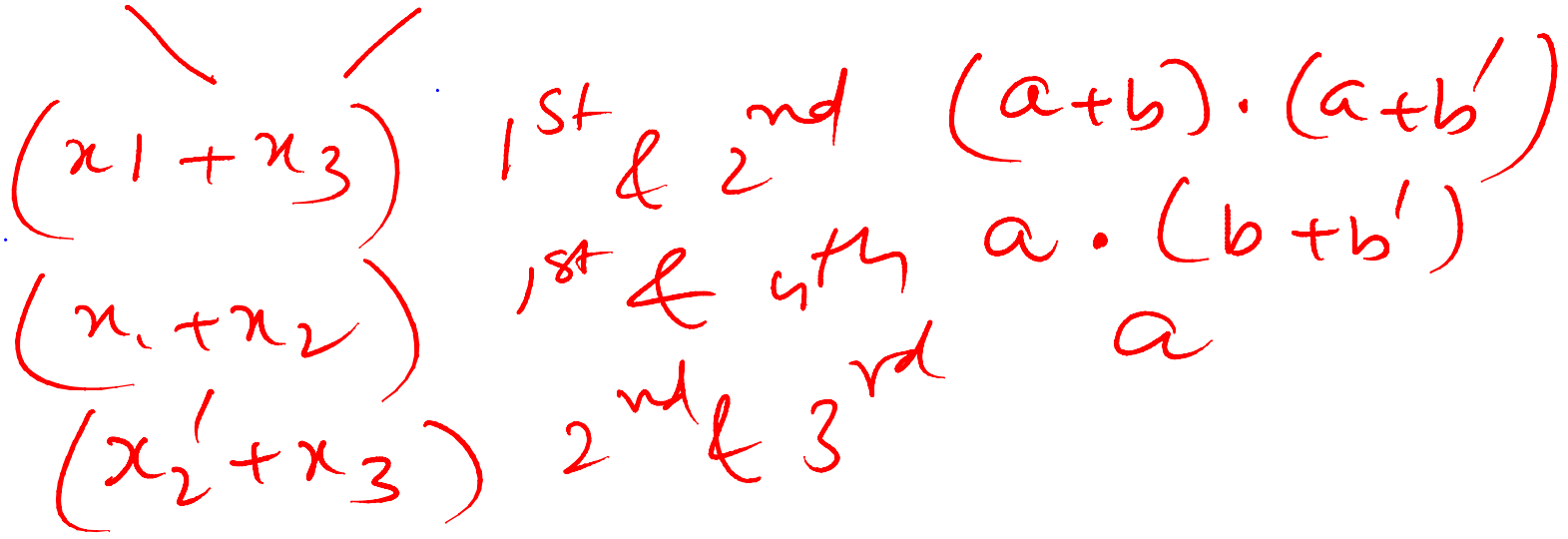
= x2 x4' + x1'x2 + x2 x3



Find minimum PoS form using algebraic manipulations (2.15)

Friday, August 25, 2017
8:49 PM

(x1 + x2 + x3) . (x1 + x2' + x3) . (x1'+ X2'+ x3) . (x1 + X2 + x3')



Find minimum PoS form using algebraic manipulations (2.14)

Friday, August 25, 2017
8:49 PM

(x1 + x3 + x4) . (x1 + x2' + x3) . (x1 + X2'+ x3' + x4)

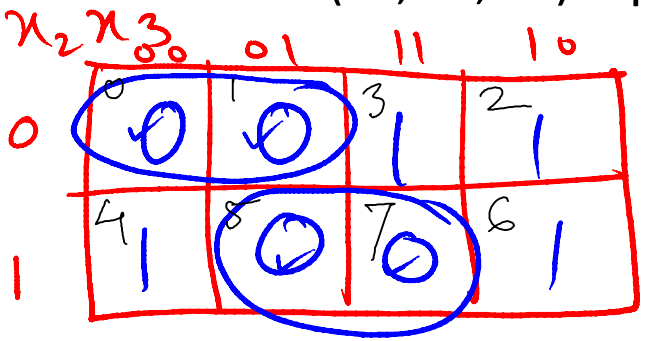
$(x_1+x_2+x_3+x_4)\cdot(x_1+x_2'+x_3+x_4)\cdot(x_1+x_2'+x_3+x_4')\cdot$
$(x_1+x_2'+x_3'+x_4)$
$(x_1+x_3+x_4)(x_1+x_2'+x_3)(x_1+x_2'+x_4)$

Sigma and Pi notations

Friday, August 25, 2017
10:38 PM

Prob 2.20 Find min SoP for f (x1, x2, x3) = ∑m (3, 4, 6, 7)

Prob 2.23 Find min PoS for f (x1, x2, x3) = ∏M (0, 1, 5, 7)

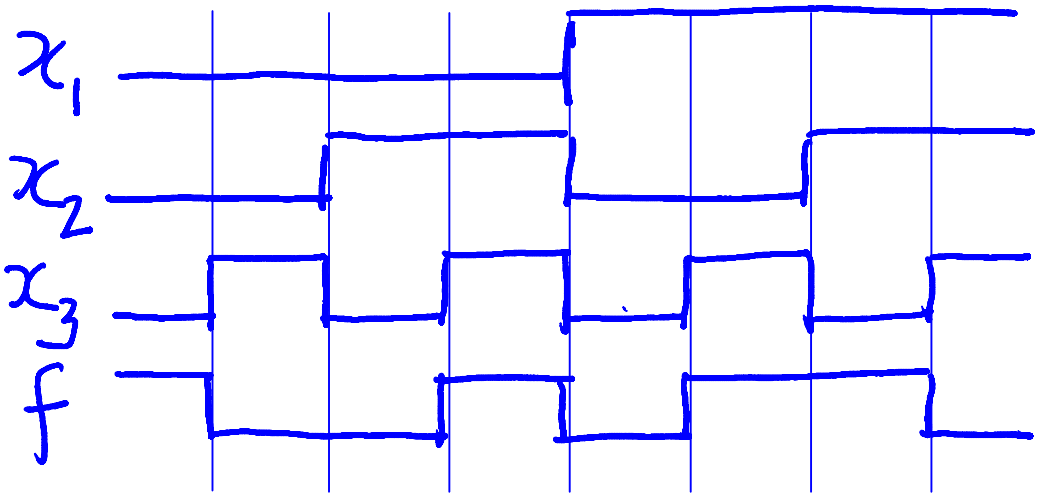


$(x_1 + x_2) \cdot (x_1' + x_3')$

$(x_1 + x_2 + x_3) \cdot$
$(x_1 + x_2 + x_3') \cdot$
$(x_1' + x_2 + x_3') \cdot$
$(x_1' + x_2' + x_3')$

Synthesize function represented by timing diagram (2.31)

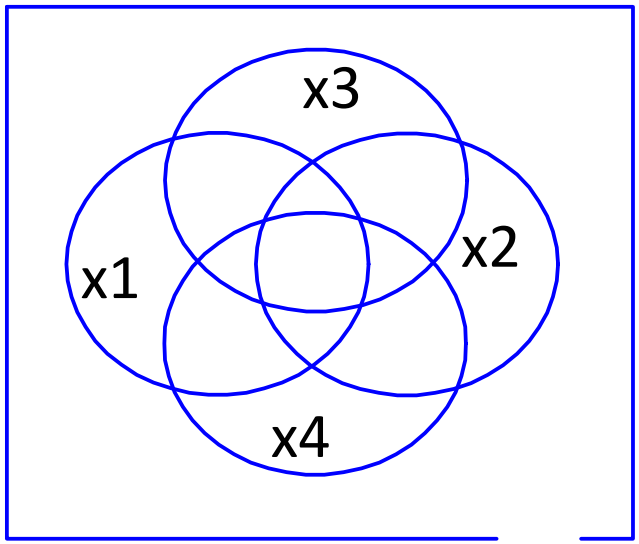
Friday, August 25, 2017
10:45 PM

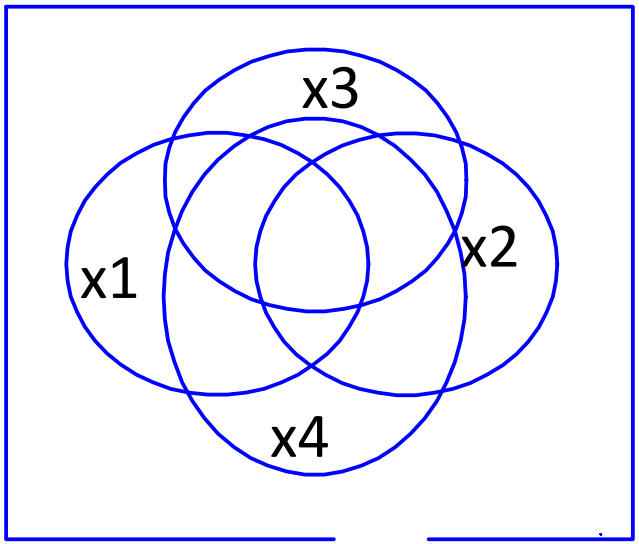


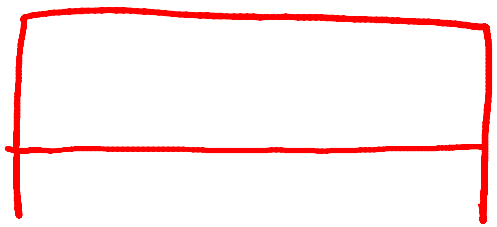
x_1	x_2	x_3	f
0	0	0	1
0	0	1	0
0	1	0	0

Venn diagram for 4 variables (2.18)

Friday, August 25, 2017
11:07 PM







Venn diagram for 4 variables (2.19)

Friday, August 25, 2017
11:07 PM