

CS311 - Written Problem 3
To be done by: Monday, April 29

1. Can we model the function represented by the truth table below perfectly with a perceptron? If not, change the label of one of the cases to make it possible. If so, change the label of one of the cases to make it impossible.

x_1	x_2	x_3	$f(x_1, x_2, x_3)$
0	0	0	1
0	1	0	0
1	0	0	1
1	1	0	0
0	0	1	1
0	1	1	1
1	0	1	1
1	1	1	0

2. Exercise 6.2
3. Exercise 6.9
4. Exercise 8.9 [a–b] (a little FOL never hurt anyone...)