Math 109 Winter 2010 Homework 4

Due 1/29/10 in class

Reading

All references will be to the Eccles book. Finish reading Chapters 6-7 (we won't cover the material on cartesian product of sets right now) and begin to read Chapters 15 and 16.

Assigned problems from the text (write up and hand in.)

Problems II p. 115: #5(i), 8(all parts), 11(i)(iii)(v)(vi)(vii), 12.

Comments: in #5, don't use truth tables. Prove statement (i), and also do the sentence "Prove that there is equality in the first of these results if and only if $B \cap C = \emptyset$". Don't do the rest of the problem.

in #8, the use of the power set $\mathcal{P}(X)$ here is just a fancy way of saying all sets A, B, C, N, etc. in question are subsets of the big set X. In other words, essentially in this problem we are taking X to be a universal set to work in.