

Name: _____

Math 378 Spring 2011

Assignment 3

To Hand In:

Brualdi Ch. 5: 7,9,11,12,13 (use Pascal),15,18,19,25,33,40

Not to hand in: 6,24,37

Extra Problems

1. Show that there is no anti-chain in the Boolean lattice when $n = 8$ consisting of 28 sets of size 5 and 30 sets of size 3. (This should be just one or two lines.)
2. In a symmetric chain decomposition of the Boolean lattice when $n = 12$, there is one chain of length 13. How many chains are there of each length? (It is not necessary to actually construct the chains!)