

MATH S-15, SUMMER 2001
GROUPS, GRAPHS, AND ALGEBRAIC STRUCTURES FOR
COMPUTING
Homework Assignment # 8
Due: July 25, 2001

Reading

Required Problems

1. Problem # 4 from p. 332 of Section 8.6.
2. Problem # 10 from p. 332 of Section 8.6.
3. Problem # 2 from p. 336 of Section 8.7.
4. Problem # 4 from p. 336 of Section 8.7.
5. Problem # 10 from p. 336 of Section 8.7.
6. Problem # 12 from p. 342 of Section 8.8.
7. How large a group of people do you need to assure that at least three of them have birthdays on the same day of the week this year?
8. Problem # 2acd from p. 467 of Section 12.1.

Exploratory Problems

9. Suppose we pick a set of 51 integers from 1 to 100. Show that there is (at least) one pair such that one divides the other evenly.
10. Problem # 2bef from p. 467 of Section 12.1.
11. How many ways are there to get a flush (all cards same suit) in poker (five cards)?
12. How many ways are there to get a full house (two of one kind and three of another kind) in poker (five cards)?