CSE 321: Discrete Structures

Assignment #7 May 23, 2003

due: Friday, May 30

For problems 1-4, if your answer is too unwieldy to evaluate, you can leave it in terms of factorials, combinations, etc., for instance 26^7 or P(26,7) or $26\binom{26}{7}$. Show enough of your work so that we can see how you arrived at your answer. If you are unfamiliar with the standard deck of playing cards, reread the paragraph on pages 262-263 and the examples following it.

- 1. Section 4.1, exercise 38.
- 2. Section 4.3, exercise 22.
- 3. Section 4.4, exercise 12.
- 4. Section 4.4, exercise 16.
- 5. Section 6.5, exercise 10.
- 6. Section 6.5, exercise 24. The answer to part (b) should show that there is a one-to-one correspondence between the equivalence classes of R and the elements of a very familiar mathematical set.
- 7. Page 433, exercise 10.