

# Automata and Formal Languages

Homework Set 7

Dec. 17, 2003

[http://staffweb.ncnu.edu.tw/shieng/course\\_fa03.htm](http://staffweb.ncnu.edu.tw/shieng/course_fa03.htm)

**Problem 1** Do Exercises 3.1, 3.5, 3.7, and 3.8 (a).

**Problem 2** Show that the collection of decidable languages is closed under the operations of

1. union.
2. concatenation.
3. star.
4. complement.