Homework 25, pp.480-2: 1, 2, 3a-d, 4a-c
Ling 409

Answers not given here are given in the book.
Some book answers are discussed here.

(1) (b) The language’s strings have any number of 0s in any position, but the number of 1s must be 3n+2, where n is a natural number (i.e. 2 mod 3).

(2) (a)

(b) all strings end in 111.

(3) Note that S3 in (b) is necessary, otherwise the automaton would be non-deterministic.

(4) (a)

(b) is 4c minus the “and”