Exam 22.11.2013

**1) Sleeping barber**

**a)**

Starvation for a costumer might occur as there is no queue, thus a customer thread could wait forever if it is constantly overtaken.

Waiting customers could be incremented above 5, as there is no lock on the field. Two customer thread could come in at 4 customers, and thus go to the line that increase customers.

Barber set someoneInChair to false at the end. This means a customer could come in and not increment the counter

**b)**

Customer should add himself to a queue to prevent starvation. This is not relevant for pThreads however.

A spinlock could be implemented around:

else:

waitingCustomers = waitingCustomers + 1

to avoid counter going above 5.