Name	Signature	Student Id Nr	Points

## **Operating Systems, miniexam 8, 27.4.2015 (6p)**

Write your answer on this exam paper in the space given. Please notice, that the <u>exam paper is 2-sided</u>.

Embedded Systems, Distributed Systems

a) [1.5 p] In eCos operating system there is a possibility to tie a spin-lock mutex (L) to a condition variable (CV). What is this feature used for and what do you gain with it?

b) [1.5 p] What is the SOA model? What problem does it solve? What parts does it have and what do they do?

## Data Security

c) [1.5 p] How does role-based access control (RBAC) differ from normal access control? Can one use RBAC with mandatory access control (MAC)? Explain.

d) [1.5 p] One uses "salt" with UNIX password management. What does this mean in practice? What do you gain with salt?