University of the Saarland
Department 6.2 – Informatik
Prof. Dr. W.J. Paul

Computer Architecture II – WS 05/06

(due: Monday, 21.11.2005)

Exercise 1: (LOSS) **(15 + 10 points)**

In the lecture we introduced the two predicates $LOSS_a$ and $LOSS_b$.

Let

$$\hat{\eta}(x) = (s, \hat{e}, \hat{f})$$
$$\eta(x) = (s, e, f)$$

To be proven:

$$LOSS_b(x) \leftrightarrow LOSS_b([x]_{p-\hat{e}})$$
$$LOSS_a(x) \leftrightarrow LOSS_a([x]_{p-\hat{e}})$$

Exercise 2: (TINY & LOSS) **(15 + 10 points)**

In the lecture we argued that the following two implications hold:

$$LOSS_a(x) \rightarrow LOSS_b(x)$$

$$TINY_a(x) \rightarrow TINY_b(x)$$

To be proven or disproven:

$$LOSS_a(x) \leftarrow LOSS_b(x)$$
$$TINY_a(x) \leftarrow TINY_b(x)$$