# Homework 5A

*This is a voluntary homework. Solving it, you can gain extra points to the exam. Hand in before the next lecture i.e. 25 Oct 16:15 (either on my desk in the classroom or send to my e-mail). You are eligible for getting points only if you hand in on time and only if it is solved (more or less) correctly.*

**Problem.** For all $n \in \mathbb{N}$, prove that if $n \perp 24$, then $n^2 \equiv 1 \pmod{24}$.