

Homework 5

Deadline: Tuesday, November 25 at 14:00.

Please submit your solutions either on paper at the beginning of the practicals or as a pdf-file in <https://owl.mff.cuni.cz/> Everything that is not immediately obvious needs to be proved or quoted from lecture notes.

1. (a) Find all invertible elements in $\mathbb{Z}[i]$.
(b) Prove that all elements with norm 2 are associates.
(c) Find $a, b \in \mathbb{Z}[i]$ such that they are not associates but $\nu(a) = \nu(b)$.