## Homework 4

Deadline: Tuesday, November 18 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. Find in the field  $\mathbb{Z}_5$  all roots of the polynomials

(a) 
$$x^5 - x$$
, (b)  $x^{11} + x^5 + 1$ , (c)  $(x+1)^{187}$ .