

# Seventh Homework Assignment

**10/29:** Chapter 20 7,15,21

**11/1:** Chapter 20 25,29,31

**11/3:** Chapter 21 7,9,11

**11/5:** Chapter 21 15,23,35

Turn-in problems due 10/22 (do 10 problems): Chapter 20 2,10,12,20,26,32;  
Chapter 21 6,8,10,18,30,34

\* **problem:** Show that the polynomial  $p(x) = x^p - x - a$  is irreducible over  $\mathbb{Z}_p$  if and only if  $a \neq c^p - c$  for any  $c \in \mathbb{Z}_p$ .