## Fall 2018, Math 320: Week 10 Preliminary Problems Due: Thursday, November 1st, 2018 Congruence Classes in F[x]

**Preliminary problems.** These problems should be completed before discussion on Thursday.

(P1) Determine whether  $[21]_8 = [37]_8$  in  $\mathbb{Z}_8$ .

(P2) Find the remainder from dividing  $f(x) = x^3 + 2x + 1$  by  $p(x) = x^2 - 1$  over  $\mathbb{Q}$ .