MAT 512 HOMEWORK 10. DUE AT THE BEGINNING OF CLASS ON WEDNESDAY, APRIL 27

One goal for this course is for you to develop your skill in effectively communicating mathematics. With this in mind, you should clearly write up your solutions. A solution with little or no justification will receive little or no credit.

(1) Perfect squares in $\mathbb{F}_p$: Prove Prop. 13.2, Do exercises 13.1, 13.6, 13.7, 13.9, 13.10, 13.11

(2) Quadratic field extensions: Do exercises 13.17 and 13.21