## Math 500: Graduate Algebra. Instructor: Walton

## Homework #12 on Splitting Fields, Separable and Cyclotomic Ext'ns, and Galois Thy Due: Wednesday, December 4, 2019 at the beginning of class.

Include full statements of problems in your solution set. See syllabus for grading guide.

- (1) Dummit-Foote §13.4, #2
- (2) Dummit-Foote §13.4, #5
- (3) Dummit-Foote §13.5, #5
- (4) Dummit-Foote §13.5, #7
- (5) Dummit-Foote §13.6, #2
- (6) Dummit-Foote §13.6, #6
- (7) Dummit-Foote §14.1, #1
- (8) Dummit-Foote §14.1 #2, 3
- (9) Dummit-Foote §14.2, #3
- (10) Dummit-Foote §14.2, #9