

MAT347Y1 HW15 Marking Scheme

Friday, March 20

Total: 23 points.

14.2.3: 5 points.

- (3) Galois Group.
- (2) Subfields. You should have 16 in total.

14.2.11: 4 points.

- (3) K/\mathbb{Q} is degree 4 with no proper subfields
- (1) Galois extension of degree 4 must have proper subfields

14.2.13: 3 points.

Handout #1:

- (a) 3 points: (2) Equality of fields (show two inclusions), (1) calculate degree.
- (b) 2 points: $n = 8$ works.
- (c) 2 points.
- (d) 4 points.