

### Review sheet for Exam 4

1. Be able to do all of the assigned Homework problems from March 23 and April 4.
2. Find the lattice of subfields between  $\mathbb{Q}$  and  $F$ , where  $F$  is the splitting field of  $x^3 - 2$  over  $\mathbb{Q}$ .
3. Find the lattice of subfields between  $\mathbb{Q}$  and  $F$ , where  $F$  is the splitting field of  $x^5 - 2$  over  $\mathbb{Q}$ . Counting  $F$  and  $\mathbb{Q}$ , there are 14 fields in this lattice.
4. Be able to state the Fundamental Theorem of Galois Theory.