

**Homework 1**  
**Due Wednesday, September 14th**

1. Do problems 1, 5, 12, 16, 17, 20, 32, 33, 37, 38, 40 from Dummit and Foote, “Abstract algebra”, section 4.5.
2. Find all groups of order  $7 \cdot 11^3$  which have a cyclic subgroup of order  $11^3$ .