Math 259, Section 33: Honors Algebra III
Spring Quarter 2009
John Boller
Homework 1, Final Version
Due: Friday, April 3, 2009

1. (*) Read Dummit and Foote, Sections 12.1.
2. (*) Dummit and Foote, Section 12.1, #1–9.
3. Let R be a commutative ring with 1 such that every submodule of a finitely generated free R-module is free. Prove that R is a principal ideal domain.