MATH 724
SUMMER 2009
HOMEWORK 3

Yesterday.

1. (5 pt) Show that $\mathrm{Tor}_n^R(A, B)$ is well-defined. That is, show that $\mathrm{Tor}_n^R(-, B)$ acts on A equivalently to the way that $\mathrm{Tor}_n^R(A, -)$ acts on B.

2. (5 pt) Let R be a domain. Show that if $I \subseteq R$ is an invertible ideal then I is a projective $R-$module, and use this to conclude that if R is Dedekind then every ideal is projective.