Problem Set 1
Due: September 10, 2009

1. Auslander–Reiten–Smalø, Chapter 1, Exercise 1. (No need to write out proofs; just give a list.)
2. Auslander–Reiten–Smalø, Chapter 1, Exercise 5.
4. Prove that if $P \rightarrow A$ and $P' \rightarrow A$ are two projective covers of $A$, then $P \simeq P'$.
5. Describe all the indecomposable projective modules for the ring $\Lambda = [\star \star]$. 