

## Physics 711, Symmetry Problems in Physics Fall 2005

### Homework: Assignment 1

Due 9/13/05

Georgi, 1A, 1B, 1C.

Prove that the identity and the inverse are unique.

Prove that the existence of a left identity and a left inverse implies the existence of a right identity and a right inverse. (The same holds of course for assuming the right identity and inverse and proving that the left ones exist.)