

lib/algebra/permutation_unittest.ath

```
1 load "group"
2 load "algebra/permutation"
3
4 open Permutation
5
6 define perm-group :=
7   (renaming |{Group.+ := o, Group.<0> := identity,
8             Group.U- := inverse, Group.- := div}|)
9
10 assert (theory-axioms Permutation.theory)
11
12 define perm-prop := method (P) (!prove-property P no-renaming Permutation.theory)
13
14 (!perm-prop consistent-inverse)
15 (!perm-prop associative)
16 (!perm-prop right-identity)
17 (!perm-prop left-identity)
18 (!perm-prop right-inverse-lemma)
19 (!perm-prop right-inverse)
20
21 (set-flag print-var-sorts "off")
22 (print-instance-check perm-group Group.theory)
23
24 define perm-group-prop := method (P) (!prove-property P perm-group Group.theory)
25
26 (!perm-group-prop Group.left-inverse)
27 (!perm-group-prop Group.double-negation)
28 (!perm-group-prop Group.unique-negation)
29 (!perm-group-prop Group.neg-plus)
```