

# lib/main/integer-power-series-group.ath

```
1  # Showing that power-series over Z form an additive group.
2
3  load "integer-power-series"
4  load "group"
5
6  open ZPS
7
8  define ZPSAdditive-Group :=
9    (renaming |{Group.+ := +, Group.<0> := zero, Group.U- := negate, Group.- := -}|)
10
11  (print-instance-check ZPSAdditive-Group Group.theory)
12
13  (!claim (get-property Semigroup.associative ZPSAdditive-Group Group.theory))
```