

## Natural Integer Isomorphism

## Why

Do the natural numbers correspond (in the sense of Isomorphisms) to elements of integers.

## Main result

Indeed, the natural numbers correspond to the  $\mathbb{Z}_+$ .

**Proposition 1.**  $(\mathbf{Z}_{++}, + \mid \mathbf{Z}_{++})$  and  $(\omega, +)$  are isomorphic.

*Proof.* The function is 
$$f(n) = [(n,0)]^{1}$$

<sup>&</sup>lt;sup>1</sup>The full account will appear in future editions.

