

```
data  $\mathbb{N}$  : Set where
  zero :  $\mathbb{N}$ 
  suc :  $\mathbb{N} \rightarrow \mathbb{N}$ 
{-# BUILTIN NATURAL  $\mathbb{N}$  #-}
```

```
data  $\mathbb{Z}$  : Set where
  pos :  $\mathbb{N} \rightarrow \mathbb{Z}$ 
  negsuc :  $\mathbb{N} \rightarrow \mathbb{Z}$ 
{-# BUILTIN INTEGER  $\mathbb{Z}$  #-}
{-# BUILTIN INTEGERPOS pos #-}
{-# BUILTIN INTEGERNEGSUC negsuc #-}
```

```
 $_{\_}+_{}_{\_}$  :  $\mathbb{N} \rightarrow \mathbb{N} \rightarrow \mathbb{N}$ 
zero +  $n$  =  $n$ 
suc  $m$  +  $n$  = suc ( $m$  +  $n$ )
{-# BUILTIN NATPLUS  $_{\_}+_{}_{\_}$  #-}
```