

```

SPEC NAT =
{ based_on BOOL,
  sort Nat,

  0 :          Nat,
  succ, pred : Nat → Nat,
  iszero :     Nat → Bool,
  - + - , - * - : Nat, Nat → Nat,   Infix

  Nat generated_by 0, succ,

  iszero(0) = true,
  iszero(succ(x)) = false,

  pred(succ(x)) = x,

  0 + y = y,
  succ(x) + y = succ(x + y),
  0 * y = 0,
  succ(x) * y = y + (x * y),
}

```