

t44\_nat\_1

(TMS7hLjhQT45qTmMfvw4szuDikdGrKnH5j)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_card\_1 : \iota \Rightarrow o$  be given. Let  $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_card\_1 X0) \Rightarrow (\forall X1.(v1\_card\_1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (\neg r1\_ordinal1 X1 X0))) \quad (1)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((r1\_xxreal\_0 X0 X1) \Leftrightarrow (r1\_ordinal1 X0 X1))) \quad (2)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v1\_card\_1 X0) \quad (3)$$

**Theorem 1**

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (\neg r1\_xxreal\_0 X1 X0)))$$