

## t44\_card\_3

(TMP1kLyqLyEerbmLvYbWy2VQZVAeDYDWx9E)

October 27, 2020

Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_card\_1 : \iota \Rightarrow o$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $r2\_wellord2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow (\forall X1.(v3\_ordinal1 X1) \Rightarrow ((k1\_card\_1 X0 \in k1\_card\_1 X1) \Rightarrow (X0 \in X1))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.r2\_wellord2 X0 X0 \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_card\_1 X1) \Rightarrow ((X1 = k1\_card\_1 X0) \Leftrightarrow (r2\_wellord2 X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_card\_1 X0) \Rightarrow (v3\_ordinal1 X0) \quad (4)$$

### **Theorem 1**

$$\forall X0.(v3\_ordinal1 X0) \Rightarrow (\forall X1.(v1\_card\_1 X1) \Rightarrow ((k1\_card\_1 X0 \in X1) \Rightarrow (X0 \in X1)))$$