

t70\_card\_1  
(TMSFFAh8t6sD1Dtdasc1G2VVgPgbjFbSBnW)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v2\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $r2\_wellord2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (r2\_wellord2\ X0\ X1) \Leftrightarrow (k1\_card\_1\ X0 = k1\_card\_1\ X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r2\_wellord2\ X0\ X1) \Leftrightarrow (\exists X2. ((v1\_relat\_1\ X2) \wedge (v1\_funct\_1\ X2)) \wedge ((v2\_funct\_1\ X2) \wedge ((k9\_xtuple\_0\ X2 = X0) \wedge (k10\_xtuple\_0\ X2 = X1)))) \quad (2)$$

**Theorem 1**

$$\forall X0. ((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow ((v2\_funct\_1\ X0) \Rightarrow (k1\_card\_1\ (k9\_xtuple\_0\ X0) = k1\_card\_1\ (k10\_xtuple\_0\ X0)))$$