

t39_card_1 (TMMMxXAfWPmmfgFMJvhF- BQnnn1Xe6Tf3T5Y)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k4_relat_1 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $r2_wellord2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_card_1 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\forall X0.(k9_xtuple_0 (k4_relat_1 X0) = X0) \wedge (k10_xtuple_0 (k4_relat_1 X0) = X0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.r2_wellord2 X0 X0 \quad (2)$$

Assume the following.

$$\forall X0.(v1_relat_1 (k4_relat_1 X0)) \wedge (v1_funct_1 (k4_relat_1 X0)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(v1_card_1 X1) \Rightarrow ((X1 = k1_card_1 X0) \Leftrightarrow (r2_wellord2 X0 X1)) \quad (4)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0) \Leftrightarrow (\exists X1.((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \wedge ((k10_xtuple_0 X1 = X0) \wedge (k9_xtuple_0 X1 \in k4_ordinal1))) \quad (5)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Leftrightarrow (X0 \in k4_ordinal1) \quad (6)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_card_1 X0) \quad (7)$$

Theorem 1

$$\forall X0.(v7_ordinal1 X0) \Rightarrow ((v1_finset_1 X0) \wedge (v1_finset_1 (k1_card_1 X0)))$$