

t45_card_1
(TMSfbUk3mC1stwveaH5JX4PtgKjm4Lafm6d)

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Let $v1_finset.1 : \iota \Rightarrow o$ be given. Let $k2_card.1 : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_card.1 : \iota \Rightarrow \iota$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $r2_wellord2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_card.1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k2_card.1 (k1_card.1 X0) = k1_card.1 (k1_ordinal1 X0)) \quad (1)$$

Assume the following.

$$\forall X0. \neg(v1_finset.1 X0) \wedge (\forall X1.(v7_ordinal1 X1) \Rightarrow (\neg r2_wellord2 X0 X1)) \quad (2)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow ((v1_finset.1 X0) \wedge (v1_finset.1 (k1_card.1 X0))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1.(r2_wellord2 X0 X1) \Rightarrow (k2_card.1 X0 = k2_card.1 X1) \quad (4)$$

Assume the following.

$$\forall X0. ((v3_ordinal1 X0) \wedge (v7_ordinal1 X0)) \Rightarrow (v7_ordinal1 (k1_ordinal1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.v1_card.1 (k1_card.1 X0) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1.(v1_card.1 X1) \Rightarrow ((X1 = k1_card.1 X0) \Leftrightarrow (r2_wellord2 X0 X1)) \quad (7)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v3_ordinal1 X0) \quad (8)$$

Theorem 1 $\forall X0.(v1_finset.1 X0) \Rightarrow (v1_finset.1 (k2_card.1 X0)).$