

t69_card_2 (TMVcA-
JVR71JCb2DuBUSCadeFiAEfZCLFRPQ)

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Let $v1_card_1 : \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $r2_wellord2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow ((X0 \neq k1_xboole_0) \Rightarrow (k1_xboole_0 \in X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (r1_ordinal1 (k1_card_1 X0) X0) \quad (2)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (\forall X1.(v1_card_1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (\neg r1_ordinal1 X1 X0))) \quad (3)$$

Assume the following.

$$\forall X0.k1_card_1 (k1_tarski X0) = np_1 \quad (4)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (r1_ordinal1 (k1_ordinal1 X0) X1))) \quad (5)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\neg (r1_ordinal1 X0 np_1) \wedge ((X0 \neq k1_xboole_0) \wedge (X0 \neq np_1))) \quad (6)$$

Assume the following.

$$np_1 = k1_tarski k1_xboole_0 \quad (7)$$

Assume the following.

$$k1_ordinal1\ np_1 = np_2 \quad (8)$$

Assume the following.

$$\forall X0.v1_card_1 (k1_card_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Leftrightarrow (\exists X1.(v3_ordinal1 X1) \wedge ((X0 = X1) \wedge (\forall X2.(v3_ordinal1 X2) \Rightarrow ((r2_wellord2 X2 X1) \Rightarrow (r1_ordinal1 X1 X2)))))) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (\neg X1 \in X0) \quad (11)$$

Theorem 1 $\forall X0.(v1_card_1 X0) \Rightarrow ((np_1 \in X0) \Leftrightarrow (r1_ordinal1\ np_2 X0)).$