

t88_card_3

(TMVzcnAAgMa9Ls23xSermfttLn7pSYa66zd)

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Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k2_card_1 : \iota \Rightarrow \iota$ be given. Let $v1_card_1 : \iota \Rightarrow o$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (\forall X1.(v1_card_1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (\neg r1_ordinal1 X1 X0))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (\forall X1.(v1_card_1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow ((r1_ordinal1 X0 X1) \wedge (X0 \neq X1)))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(k1_card_1 X0 = k1_card_1 X1) \Rightarrow (k2_card_1 X0 = k2_card_1 X1) \quad (3)$$

Assume the following.

$$\forall X0.v1_card_1 (k2_card_1 X0) \quad (4)$$

Assume the following.

$$\forall X0.v1_card_1 (k1_card_1 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(v1_card_1 X1) \Rightarrow ((X1 = k2_card_1 X0) \Leftrightarrow ((k1_card_1 X0 \in X1) \wedge (\forall X2.(v1_card_1 X2) \Rightarrow ((k1_card_1 X0 \in X2) \Rightarrow (r1_ordinal1 X1 X2)))))) \quad (6)$$

Theorem 1

$$\forall X0.\forall X1.(k1_card_1 X0 = k1_card_1 X1) \Leftrightarrow (k2_card_1 X0 = k2_card_1 X1)$$