

t12_card_4

(TMLVaVX3cU7yrNo8Z1JhDoJay8DC4EfEnRd)

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Let $v4_card_3 : \iota \Rightarrow o$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $v1_card_1 : \iota \Rightarrow o$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k2_card_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_card_1 X0) \Rightarrow (\forall X1.(v1_card_1 X1) \Rightarrow (\forall X2. \\ & ((r1_ordinal1 (k1_card_1 X2) X0) \wedge (\forall X3.(X3 \in X2) \Rightarrow (r1_ordinal1 \\ & (k1_card_1 X3) X1))) \Rightarrow (r1_ordinal1 (k1_card_1 (k3_tarski X2)) \\ & (k2_card_2 X0 X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$k2_card_2 k4_ordinal1 k4_ordinal1 = k4_ordinal1 \quad (2)$$

Assume the following.

$$v1_card_1 k4_ordinal1 \quad (3)$$

Assume the following.

$$\forall X0.(v4_card_3 X0) \Leftrightarrow (r1_ordinal1 (k1_card_1 X0) k4_ordinal1) \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v4_card_3 X0) \wedge (\forall X1.(X1 \in X0) \Rightarrow (v4_card_3 X1))) \Rightarrow \\ & (v4_card_3 (k3_tarski X0)) \end{aligned}$$