

t93_card_2

(TMSd1phQF9HXYAPJrwJptRRGLdrNsUTSbHc)

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Let $v1_card_1 : \iota \Rightarrow o$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k3_card_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_card_1 X0) \Rightarrow (\forall X1.(v1_card_1 X1) \Rightarrow (\forall X2. \\ & (v1_card_1 X2) \Rightarrow (\forall X3.(v1_card_1 X3) \Rightarrow (\neg(\neg(\neg(X0 \in X1) \wedge (X2 \in \\ & X3)) \wedge (\neg(r1_ordinal1 X0 X1) \wedge (X2 \in X3)) \wedge (\neg(X0 \in X1) \wedge (r1_ordinal1 \\ & X2 X3)) \wedge (\neg(r1_ordinal1 X0 X1) \wedge (r1_ordinal1 X2 X3)))))) \wedge ((X0 \neq k6_numbers) \wedge \\ & (\neg r1_ordinal1 (k3_card_2 X0 X2) (k3_card_2 X1 X3)))))) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

$$\forall X0.r1_tarski k1_xboole_0 X0 \quad (3)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow ((X0 \neq k6_numbers) \Rightarrow (k3_card_2 k6_numbers X0 = k6_numbers)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow (r1_ordinal1 X0 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow (r1_ordinal1 X0 X1) \Leftrightarrow (r1_tarski X0 X1) \quad (6)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_card_1 X0)\wedge(v1_card_1 X1))\Rightarrow(v1_card_1 (k3_card_2 X0 X1)) \quad (8)$$

Assume the following.

$$\forall X0.(v1_card_1 X0)\Rightarrow(v3_ordinal1 X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1)\Rightarrow(\neg X1 \in X0) \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_card_1 X0)\Rightarrow(\forall X1.(v1_card_1 X1)\Rightarrow(\forall X2. \\ & (v1_card_1 X2)\Rightarrow(\neg((X0 \in X1)\vee(r1_ordinal1 X0 X1))\wedge((X2\neq k6_numbers)\wedge \\ & (\neg(r1_ordinal1 (k3_card_2 X2 X0) (k3_card_2 X2 X1))\wedge(r1_ordinal1 \\ & (k3_card_2 X0 X2) (k3_card_2 X1 X2))))))) \end{aligned}$$