

l6_card_4

(TMJY7qLy16ma1QeQGzupo4u2Ndf2YHBYgU6)

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Let $k8_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow ((X0 \in X1) \Rightarrow (X0 = k4_tarski (k1_xtuple_0 X0) (k2_xtuple_0 X0))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X0 \in k2_zfmisc_1 X1 X2) \Rightarrow ((k1_xtuple_0 X0 \in X1) \wedge (k2_xtuple_0 X0 \in X2)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((m1_subset_1 X2 (k1_zfmisc_1 X0)) \wedge (m1_subset_1 X3 (k1_zfmisc_1 X1))) \Rightarrow (k8_mcart_1 X0 X1 X2 X3 = k2_zfmisc_1 X2 X3) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge ((m1_subset_1 X2 X0) \wedge (m1_subset_1 X3 X1)))) \Rightarrow (k1_domain_1 X0 X1 X2 X3 = k4_tarski X2 X3) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.v1_relat_1 (k2_zfmisc_1 X0 X1) \quad (7)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (8)$$

Theorem 1

$$\begin{aligned} &\forall X0.\neg(X0 \in k8_mcart_1 k1_numbers k1_numbers k5_numbers \\ &\quad k5_numbers) \wedge (\forall X1.(m1_subset_1 X1 k5_numbers) \Rightarrow (\forall X2. \\ &\quad (m1_subset_1 X2 k5_numbers) \Rightarrow (X0 \neq k1_domain_1 k5_numbers k5_numbers \\ &\quad X1 X2))) \end{aligned}$$