

t16_card_5

(TMQ5HgGJWPfejBESZCo6h8Dp8EG6HdLGuoE)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_card_1 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $np_2 : \iota$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (\forall X1.(v1_card_1 X1) \Rightarrow ((v1_finset_1 X0) \Rightarrow ((v1_finset_1 X1) \vee ((X0 \in X1) \wedge (r1_ordinal1 X0 X1)))))) \quad (1)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow ((\neg v1_finset_1 X0) \Leftrightarrow (r1_ordinal1 k4_ordinal1 X0)) \quad (2)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow ((k6_numbers \in X0) \Leftrightarrow (r1_ordinal1 np_1 X0)) \quad (3)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (\forall X1.(v1_card_1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow ((r1_ordinal1 X0 X1) \wedge (X0 \neq X1)))) \quad (4)$$

Assume the following.

$$\forall X0.k1_card_1 (k1_tarski X0) = np_1 \quad (5)$$

Assume the following.

$$((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \quad (6)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (7)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (8)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0) \Rightarrow (k5_card_1 X0 = k1_card_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0) \Rightarrow (m1_subset_1 (k5_card_1 X0) k4_ordinal1) \quad (10)$$

Assume the following.

$$\forall X0.v1_card_1 (k1_card_1 X0) \quad (11)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v1_finset_1 X0) \quad (12)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (v3_ordinal1 X0) \quad (13)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((\neg v1_finset_1 \\ X1) \wedge (v1_card_1 X1)) \Rightarrow ((X1 \neq k6_numbers) \wedge ((X1 \neq np_1) \wedge ((X1 \neq np_2) \wedge \\ ((X1 \neq k5_card_1 X0) \wedge ((k5_card_1 X0 \in X1) \wedge (r1_ordinal1 k4_ordinal1 \\ X1))))))) \end{aligned}$$