

t25_card_lar (TMMtTUWNGBr- Lug5xQwkeKv8DfioHArxjGWY)

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Let $v1_finset.1 : \iota \Rightarrow o$ be given. Let $v1_card.1 : \iota \Rightarrow o$ be given. Let $v4_card.3 : \iota \Rightarrow o$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_card.5 : \iota \Rightarrow \iota$ be given. Let $v1_card_lar : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_card_lar : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v4_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v3_ordinal1 X0) \wedge ((v4_ordinal1 X0) \wedge (\neg v1_finset.1 \\ X0))) \Rightarrow (\forall X1.(m1_subset.1 X1 (k1_zfmisc.1 X0)) \Rightarrow ((v1_card_lar \\ X1 X0) \Leftrightarrow (\forall X2.(v3_ordinal1 X2) \Rightarrow (\neg(X2 \in X0) \wedge (\forall X3.(\\ v3_ordinal1 X3) \Rightarrow (\neg(X3 \in X1) \wedge (r1_ordinal1 X2 X3))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_finset.1 X0) \wedge ((v1_card.1 X0) \wedge (\neg v4_card.3 X0))) \Rightarrow \\ (\forall X1.(m1_subset.1 X1 (k1_zfmisc.1 X0)) \Rightarrow (((k4_ordinal1 \in \\ k1_card.5 X0) \wedge (v1_card_lar X1 X0)) \Rightarrow (\forall X2.(v3_ordinal1 \\ X2) \Rightarrow (\neg(X2 \in X0) \wedge (\forall X3.((v3_ordinal1 X3) \wedge ((v4_ordinal1 \\ X3) \wedge (\neg v1_finset.1 X3)))) \Rightarrow (\neg(X3 \in X0) \wedge ((X2 \in X3) \wedge (X3 \in k2_card_lar \\ X0 X1)))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow ((\\ r1_ordinal1 X0 X1) \vee (X1 \in X0))) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((v3_ordinal1 X0) \wedge ((v4_ordinal1 X0) \wedge \\ (\neg v1_finset.1 X0))) \wedge (m1_subset.1 X1 (k1_zfmisc.1 X0))) \Rightarrow (m1_subset.1 \\ (k2_card_lar X0 X1) (k1_zfmisc.1 X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.((\neg v1_finset.1 X0) \wedge (v1_card.1 X0)) \Rightarrow ((v4_ordinal1 \\ X0) \wedge (v1_card.1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (v3_ordinal1 X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (\neg X1 \in X0) \quad (7)$$

Theorem 1

$$\begin{aligned} &\forall X0.((\neg v1_finset_1 X0) \wedge ((v1_card_1 X0) \wedge (\neg v4_card_3 X0))) \Rightarrow \\ &(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (((k4_ordinal1 \in \\ &k1_card_5 X0) \wedge (v1_card_lar X1 X0)) \Rightarrow (v1_card_lar (k2_card_lar \\ &X0 X1) X0))) \end{aligned}$$