

l19_zf_fund1 (TMJQT- myosF8CwSPJNNdjgvkmFMgaY7gm3Hz)

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Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k1_zf_lang : \iota$ be given. Let $k4_zf_fund1 : \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_zf_fund1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow \\ & (k6_domain_1 X0 X1 = k1_tarski X1) \end{aligned} \quad (2)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_finset_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & k1_zf_lang))) \Rightarrow ((X0 \in k4_zf_fund1 X1) \Leftrightarrow (\exists X2. (m2_subset_1 \\ & X2 k5_numbers k1_zf_lang) \wedge ((X2 \in X1) \wedge (X0 = k3_zf_fund1 X2)))) \end{aligned} \quad (4)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \quad (5)$$

Assume the following.

$$\neg v1_xboole_0 k1_zf_lang \quad (6)$$

Assume the following.

$$\forall X0. v1_finset_1 (k1_tarski X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (m1_subset_1 (k6_domain_1 X0 X1) (k1_zfmisc_1 X0)) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_zf_lang)\Rightarrow(m1_subset_1 (k3_zf_fund1 X0) k5_numbers) \quad (9)$$

Assume the following.

$$m1_subset_1 k1_zf_lang (k1_zfmisc_1 k5_numbers) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow (X2 = X0)) \quad (11)$$

Theorem 1

$$\forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang)\Rightarrow(k4_zf_fund1 (k6_domain_1 k1_zf_lang X0) = k6_domain_1 k5_numbers (k3_zf_fund1 X0))$$