

l3_fdif1_1 (TMS- bRko6qWZV1zxT4BpKY3Bpcc9cTecWu8Z)

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Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k4_partfun2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 \in X1) \Rightarrow ((v1_funct_1 (k2_funcop_1 X0 X2)) \wedge ((v1_funct_2 (k2_funcop_1 X0 X2) X0 X1) \wedge (m1_subset_1 (k2_funcop_1 X0 X2) (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (2)$$

Assume the following.

$$m1_subset_1 k1_xboole_0 k4_ordinal1 \quad (3)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (4)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge ((m1_subset_1 X2 (k1_zfmisc_1 X0)) \wedge (m1_subset_1 X3 X1)))) \Rightarrow (k4_partfun2 X0 X1 X2 X3 = k2_funcop_1 X2 X3) \quad (6)$$

Assume the following.

$$(\neg v1_xboole_0\ k4_ordinal1) \wedge (v3_ordinal1\ k4_ordinal1) \quad (7)$$

Assume the following.

$$\neg v1_xboole_0\ k1_numbers \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0\ X0) \wedge ((\neg v1_xboole_0\ X1) \wedge \\ & (m1_subset_1\ X1\ (k1_zfmisc_1\ X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2\ X0\ X1) \Rightarrow (m1_subset_1\ X2\ X0)) \end{aligned} \quad (9)$$

Assume the following.

$$m2_subset_1\ k6_numbers\ k1_numbers\ k5_numbers \quad (10)$$

Assume the following.

$$m1_subset_1\ k5_numbers\ (k1_zfmisc_1\ k1_numbers) \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0\ X0) \wedge \\ & ((\neg v1_xboole_0\ X1) \wedge ((m1_subset_1\ X2\ (k1_zfmisc_1\ X0)) \wedge (m1_subset_1 \\ & X3\ X1)))) \Rightarrow ((v1_funct_1\ (k4_partfun2\ X0\ X1\ X2\ X3)) \wedge (m1_subset_1 \\ & (k4_partfun2\ X0\ X1\ X2\ X3)\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))) \end{aligned} \quad (12)$$

Theorem 1

$$\begin{aligned} & (v1_funct_1\ (k4_partfun2\ k1_numbers\ k5_numbers\ k5_numbers\ k6_numbers)) \wedge \\ & ((v1_funct_2\ (k4_partfun2\ k1_numbers\ k5_numbers\ k5_numbers\ k6_numbers) \\ & k5_numbers\ k1_numbers) \wedge (m1_subset_1\ (k4_partfun2\ k1_numbers \\ & k5_numbers\ k5_numbers\ k6_numbers)\ (k1_zfmisc_1\ (k2_zfmisc_1 \\ & k5_numbers\ k1_numbers)))) \end{aligned}$$