

t16_abcmiz_1

(TMXvK7cK2fKeNFNKcwFRtRdT8JvGe2QCkJ7)

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Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k2_abcmiz_1 : \iota$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k3_card_3 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_abcmiz_1 : \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (r1_tarski X0 (k3_tarski X1)) \quad (1)$$

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.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v4_relat_1 X1 X0)) \Rightarrow (k1_relset_1 X0 X1 = k9_xtuple_0 X1) \quad (6)$$

Assume the following.

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

Assume the following.

$$\forall X0.((v1_relat_1\ X0) \wedge (v1_funct_1\ X0)) \Rightarrow (k3_card_3\ X0 = k3_tarski\ (k10_xtuple_0\ X0)) \quad (8)$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0) \wedge (v1_funct_1\ X0)) \Rightarrow (\forall X1.(X1 = k10_xtuple_0\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.(X3 \in k9_xtuple_0\ X0) \wedge (X2 = k1_funct_1\ X0\ X3)))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1\ X1) \wedge (v4_relat_1\ X1\ X0)) \Rightarrow ((v1_partfun1\ X1\ X0) \Leftrightarrow (k1_relset_1\ X0\ X1 = X0)) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.(X0 = k2_abcmiz_1) \Leftrightarrow (\exists X1.((v1_relat_1\ X1) \wedge (\\ (v4_relat_1\ X1\ k5_numbers) \wedge ((v1_funct_1\ X1) \wedge (v1_partfun1\ X1 \\ k5_numbers)))) \wedge ((X0 = k3_card_3\ X1) \wedge ((k1_funct_1\ X1\ k6_numbers = \\ ReplSep\ (toset\ (\lambda X2 : \iota.m1_subset_1\ X2\ k5_numbers))\ (\lambda X2 : \\ \iota.True)\ (\lambda X2 : \iota.k4_tarski\ k1_xboole_0\ X2)) \wedge (\forall X2. \\ (v7_ordinal1\ X2) \Rightarrow (k1_funct_1\ X1\ (k1_nat_1\ X2\ np_1) = ReplSep2 \\ (toset\ (\lambda X3 : \iota.m1_subset_1\ X3\ (k1_zfmisc_1\ (k1_funct_1\ X1 \\ X2))))\ (\lambda X3 : \iota.toset\ (\lambda X4 : \iota.m1_subset_1\ X4\ k5_numbers)) \\ (\lambda X3 : \iota.\lambda X4 : \iota.v1_finset_1\ X3)\ (\lambda X3 : \iota.\lambda X4 : \\ \iota.k4_tarski\ (k1_abcmiz_1\ X3)\ X4)))))) \end{aligned} \quad (11)$$

Theorem 1

$$r1_tarski\ (ReplSep\ (toset\ (\lambda X0 : \iota.m1_subset_1\ X0\ k5_numbers)) \\ (\lambda X0 : \iota.True)\ (\lambda X0 : \iota.k4_tarski\ k1_xboole_0\ X0))\ k2_abcmiz_1$$