

t4_metrizts

(TMahL5AZWZnnMyw7bddLJ4tx28ypwzbYoFQ)

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Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $r1_borsuk_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_waybel23 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $r1_t_0topsp : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ 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 $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $r2_borsuk_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_card_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(v1_xboole_0 X0) \wedge ((X0 \neq X1) \wedge (v1_xboole_0 X1)) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (l1_pre_topc X0) \Rightarrow (\forall X1. (l1_pre_topc X1) \Rightarrow ((\\ \neg(r1_t_0topsp X0 X1) \wedge (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 \\ X2 (u1_struct_0 X0) (u1_struct_0 X1)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X1)))))) \Rightarrow (\neg(k1_relset_1 \\ (u1_struct_0 X0) X2 = k2_struct_0 X0) \wedge (k2_relset_1 (u1_struct_0 \\ X1) X2 = k2_struct_0 X1)))) \Rightarrow ((v2_struct_0 X0) \Leftrightarrow (v2_struct_0 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge (l1_pre_topc X0)) \wedge \\ ((\neg v2_struct_0 X1) \wedge (l1_pre_topc X1))) \Rightarrow ((r2_borsuk_3 X0 X1) \Rightarrow \\ (r2_borsuk_3 X1 X0)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge (l1_pre_topc X0)) \wedge \\ ((\neg v2_struct_0 X1) \wedge (l1_pre_topc X1))) \Rightarrow ((r2_borsuk_3 X0 X1) \Leftrightarrow \\ (r1_t_0topsp X0 X1)) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1\ X0)\wedge(v3_ordinal1\ X1))\Rightarrow((r1_ordinal1\ X0\ X1)\Leftrightarrow(r1_tarski\ X0\ X1)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((l1_pre_topc\ X0)\wedge(l1_pre_topc\ X1))\Rightarrow((r1_borsuk_3\ X0\ X1)\Leftrightarrow(r1_t_0topsp\ X0\ X1)) \quad (6)$$

Assume the following.

$$\forall X0.((v2_struct_0\ X0)\wedge((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0)))\Rightarrow(v1_xboole_0\ (k2_waybel23\ X0)) \quad (7)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0\ X0)\wedge((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0)))\Rightarrow(\forall X1.((\neg v2_struct_0\ X1)\wedge((v2_pre_topc\ X1)\wedge(l1_pre_topc\ X1))))\Rightarrow((r2_borsuk_3\ X0\ X1)\Rightarrow(r1_ordinal1\ (k2_waybel23\ X1)\ (k2_waybel23\ X0)))) \quad (8)$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0)\Rightarrow(v1_card_1\ (k2_waybel23\ X0)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1)\Leftrightarrow((r1_tarski\ X0\ X1)\wedge(r1_tarski\ X1\ X0)) \quad (10)$$

Assume the following.

$$\forall X0.(v1_card_1\ X0)\Rightarrow(v3_ordinal1\ X0) \quad (11)$$

Theorem 1

$$\forall X0.((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0))\Rightarrow(\forall X1. ((v2_pre_topc\ X1)\wedge(l1_pre_topc\ X1))\Rightarrow((r1_borsuk_3\ X0\ X1)\Rightarrow(k2_waybel23\ X0 = k2_waybel23\ X1)))$$