

t20_pua2mss1
(TMGWZ3F1aMKH4gJy3sZ9fa1jLJUPQbTYcJZ)

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Let $v2_unialg_1 : \iota \Rightarrow o$ be given. Let $v4_unialg_1 : \iota \Rightarrow o$ be given. Let $l1_unialg_1 : \iota \Rightarrow o$ 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 $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_pua2mss1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_pua2mss1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k1_pua2mss1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_unialg_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k7_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k4_tarski\ X0\ X1 \in k2_zfmisc_1\ X2\ X3) \Leftrightarrow ((X0 \in X2) \wedge (X1 \in X3)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ X2))) \Rightarrow (m1_subset_1\ X0\ X2) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1\ X0\ (k1_zfmisc_1\ X1)) \Leftrightarrow (r1_tarski\ X0\ X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski\ X0\ X0 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1))) \Rightarrow ((r1_relset_1\ X0\ X1\ X2\ X3) \Leftrightarrow (r1_tarski\ X2\ X3)) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((v2_unialg_1 X0)\wedge((v4_unialg_1 X0)\wedge \\ & (l1_unialg_1 X0)))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 X0) (u1_struct_0 X0))))))\Rightarrow(m1_subset_1 (k7_pua2mss1 \\ & X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\ & X0)))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_unialg_1 X0)\wedge((v4_unialg_1 X0)\wedge(l1_unialg_1 \\ & X0)))\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 X0) (u1_struct_0 X0))))\Rightarrow(\forall X2.(m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0))))\Rightarrow \\ & ((X2 = k7_pua2mss1 X0 X1)\Leftrightarrow(\forall X3.(m1_subset_1 X3 (u1_struct_0 \\ & X0))\Rightarrow(\forall X4.(m1_subset_1 X4 (u1_struct_0 X0))\Rightarrow((k4_tarski \\ & X3 X4 \in X2)\Leftrightarrow((k4_tarski X3 X4 \in X1)\wedge(\forall X5.(m1_pua2mss1 X5 (\\ & k3_finseq_2 (u1_struct_0 X0) (u1_struct_0 X0) (k1_pua2mss1 (\\ & u1_struct_0 X0) (u1_unialg_1 X0))))\Rightarrow(\forall X6.((v1_relat_1 \\ & X6)\wedge((v1_funct_1 X6)\wedge(v1_finseq_1 X6))))\Rightarrow(\forall X7.((v1_relat_1 \\ & X7)\wedge((v1_funct_1 X7)\wedge(v1_finseq_1 X7))))\Rightarrow(((k7_finseq_1 (k7_finseq_1 \\ & X6 (k12_finseq_1 (u1_struct_0 X0) X3)) X7 \in k1_relset_1 (k3_finseq_2 \\ & (u1_struct_0 X0) X5)\wedge(k7_finseq_1 (k7_finseq_1 X6 (k12_finseq_1 \\ & (u1_struct_0 X0) X4)) X7 \in k1_relset_1 (k3_finseq_2 (u1_struct_0 \\ & X0) X5))\Rightarrow(k4_tarski (k1_funct_1 X5 (k7_finseq_1 (k7_finseq_1 \\ & X6 (k12_finseq_1 (u1_struct_0 X0) X3)) X7)) (k1_funct_1 X5 (k7_finseq_1 \\ & (k7_finseq_1 X6 (k12_finseq_1 (u1_struct_0 X0) X4)) X7)) \in X1)))))))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_relat_1 X0)\Rightarrow(\forall X1.(r1_tarski X0 X1)\Leftrightarrow(\forall X2. \\ & \forall X3.(k4_tarski X2 X3 \in X0)\Rightarrow(k4_tarski X2 X3 \in X1))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \end{aligned} \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v2_unialg_1 X0)\wedge((v4_unialg_1 X0)\wedge(l1_unialg_1 \\ & X0)))\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 X0) (u1_struct_0 X0))))\Rightarrow(r1_relset_1 (u1_struct_0 \\ & X0) (u1_struct_0 X0) (k7_pua2mss1 X0 X1) X1)) \end{aligned}$$