

t26_cohsp_1 (TMWrjodzyxkxQQzSQAQCQin- pwCvbofmCSQX)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_classes1 : \iota \Rightarrow o$ be given. Let $v1_coh_sp : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_cohsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k5_cohsp_1 : \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (r1_tarski (k2_tarski X0 X1) X2) \Leftrightarrow ((X0 \in X2) \wedge (X1 \in X2)) \quad (1)$$

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.

$$\forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. \forall X2. (k4_tarski X1 X2 \in k5_cohsp_1 X0) \Leftrightarrow ((v1_finset_1 X1) \wedge ((X1 \in k9_xtuple_0 X0) \wedge (X2 \in k1_funct_1 X0 X1)))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))))) \Rightarrow (k6_cohsp_1 X0 X1 X2 = k5_cohsp_1 X2) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0)\wedge \\ & (((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 X1)\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))))))\wedge(m1_subset_1 X3 X0)))\Rightarrow(k3_funct_2 X0 \\ & X1 X2 X3 = k1_funct_1 X2 X3) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0)\wedge \\ & (((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 X1)\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))))))\wedge(m1_subset_1 X3 X0)))\Rightarrow(m1_subset_1 (\\ & k3_funct_2 X0 X1 X2 X3) X1) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.k4_tarski X0 X1 = k2_tarski (k2_tarski X0 X1) (k1_tarski X0) \quad (7)$$

Assume the following.

$$\forall X0.(v1_classes1 X0)\Leftrightarrow(\forall X1.\forall X2.((X1 \in X0)\wedge (r1_tarski X2 X1))\Rightarrow(X2 \in X0)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.k2_tarski X0 X1 = k2_tarski X1 X0 \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0)\wedge((v1_classes1 X0)\wedge(v1_coh_sp \\ & X0)))\Rightarrow(\forall X1.((\neg v1_xboole_0 X1)\wedge((v1_classes1 X1)\wedge(v1_coh_sp \\ & X1)))\Rightarrow(\forall X2.((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 X1)\wedge(m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))))))\Rightarrow(\forall X3.(m1_subset_1 \\ & X3 X0)\Rightarrow(\forall X4.\forall X5.((k4_tarski X3 X4 \in k6_cohsp_1 X0 \\ & X1 X2)\wedge(k4_tarski X3 X5 \in k6_cohsp_1 X0 X1 X2))\Rightarrow(k2_tarski X4 X5 \in \\ & X1)))))) \end{aligned}$$