

t24_inensp_1 (TMTj-
siZE5w6EeZDygUsrcKoZZvWnMncMdnY)

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Let $v15_inensp_1 : \iota \Rightarrow o$ be given. Let $l2_inensp_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_inensp_1 : \iota \Rightarrow \iota$ be given. Let $u2_inensp_1 : \iota \Rightarrow \iota$ be given. Let $r4_inensp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1_inensp_1 : \iota \Rightarrow o$ be given. Let $v6_inensp_1 : \iota \Rightarrow o$ be given. Let $v7_inensp_1 : \iota \Rightarrow o$ be given. Let $v5_inensp_1 : \iota \Rightarrow o$ be given. Let $v8_inensp_1 : \iota \Rightarrow o$ be given. Let $v9_inensp_1 : \iota \Rightarrow o$ be given. Let $v10_inensp_1 : \iota \Rightarrow o$ be given. Let $v11_inensp_1 : \iota \Rightarrow o$ be given. Let $v12_inensp_1 : \iota \Rightarrow o$ be given. Let $v13_inensp_1 : \iota \Rightarrow o$ be given. Let $v14_inensp_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(l2_inensp_1 X0) \Rightarrow (l1_inensp_1 X0) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_inensp_1 X0) \Rightarrow ((v6_inensp_1 X0) \Leftrightarrow (\forall X1.(m1_subset_1 \\ X1 (u1_inensp_1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_inensp_1 X0)) \Rightarrow \\ (\exists X3.(m1_subset_1 X3 (u2_inensp_1 X0)) \wedge (r4_inensp_1 X0 (\\ k7_domain_1 (u1_inensp_1 X0) X1 X2) X3)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_inensp_1 X0) \Rightarrow ((v7_inensp_1 X0) \Leftrightarrow (\forall X1.(m1_subset_1 \\ X1 (u1_inensp_1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_inensp_1 X0)) \Rightarrow \\ (\forall X3.(m1_subset_1 X3 (u2_inensp_1 X0)) \Rightarrow (\forall X4.(m1_subset_1 \\ X4 (u2_inensp_1 X0)) \Rightarrow (((r4_inensp_1 X0 (k7_domain_1 (u1_inensp_1 \\ X0) X1 X2) X3) \wedge (r4_inensp_1 X0 (k7_domain_1 (u1_inensp_1 X0) X1 X2) \\ X4)) \Rightarrow ((X1 = X2) \vee (X3 = X4)))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(l2_inensp_1 X0) \Rightarrow ((v15_inensp_1 X0) \Rightarrow ((v5_inensp_1 X0) \wedge \\ ((v6_inensp_1 X0) \wedge ((v7_inensp_1 X0) \wedge ((v8_inensp_1 X0) \wedge ((v9_inensp_1 \\ X0) \wedge ((v10_inensp_1 X0) \wedge ((v11_inensp_1 X0) \wedge ((v12_inensp_1 X0) \wedge \\ ((v13_inensp_1 X0) \wedge (v14_inensp_1 X0)))))))))) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v15_incsp_1 X0) \wedge (l2_incsp_1 X0)) \Rightarrow (\forall X1. (\\ & \quad m1_subset_1 X1 (u1_incsp_1 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (\\ & \quad u1_incsp_1 X0)) \Rightarrow (\neg(X1 \neq X2) \wedge (\forall X3. (m1_subset_1 X3 (u2_incsp_1 \\ & \quad X0)) \Rightarrow (\neg \forall X4. (m1_subset_1 X4 (u2_incsp_1 X0)) \Rightarrow ((r4_incsp_1 \\ & \quad X0 (k7_domain_1 (u1_incsp_1 X0) X1 X2) X4) \Leftrightarrow (X4 = X3))))))) \end{aligned}$$