

t39_inensp_1
(TMTGvJqbnccddurf4xK6KHQtwf4deF16VvPG)

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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 $r1_inensp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_inensp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_inensp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_inensp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_inensp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v15_inensp_1 X0) \wedge (l2_inensp_1 X0)) \Rightarrow (\forall X1.(\\ & m1_subset_1 X1 (u1_inensp_1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (\\ & u1_inensp_1 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_inensp_1 X0)) \Rightarrow \\ & ((\neg v3_inensp_1 (k8_domain_1 (u1_inensp_1 X0) X1 X2 X3) X0) \Rightarrow (k2_inensp_1 \\ & X0 X1 X2 X3 = k3_inensp_1 X0 X3 (k1_inensp_1 X0 X1 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v15_inensp_1 X0) \wedge (l2_inensp_1 X0)) \Rightarrow (\forall X1.(\\ & m1_subset_1 X1 (u1_inensp_1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (\\ & u1_inensp_1 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_inensp_1 X0)) \Rightarrow \\ & (\forall X4.(m1_subset_1 X4 (u2_inensp_1 X0)) \Rightarrow (\neg (X1 \neq X2) \wedge ((r4_inensp_1 \\ & X0 (k7_domain_1 (u1_inensp_1 X0) X1 X2) X4) \wedge ((\neg r1_inensp_1 X0 X3 X4) \wedge \\ & (v3_inensp_1 (k8_domain_1 (u1_inensp_1 X0) X1 X2 X3) X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v15_inensp_1 X0) \wedge (l2_inensp_1 X0)) \Rightarrow (\forall X1.(\\ & m1_subset_1 X1 (u1_inensp_1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (\\ & u1_inensp_1 X0)) \Rightarrow ((X1 \neq X2) \Rightarrow (\forall X3.(m1_subset_1 X3 (u2_inensp_1 \\ & X0)) \Rightarrow ((X3 = k1_inensp_1 X0 X1 X2) \Leftrightarrow (r4_inensp_1 X0 (k7_domain_1 (u1_inensp_1 \\ & X0) X1 X2) X3)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v15_incsp_1 X0) \wedge (l2_incsp_1 X0)) \Rightarrow (\forall X1.(\\ & m1_subset_1 X1 (u1_incsp_1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (\\ & u1_incsp_1 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_incsp_1 X0)) \Rightarrow \\ & (\forall X4.(m1_subset_1 X4 (u2_incsp_1 X0)) \Rightarrow ((r4_incsp_1 X0 \\ & (k7_domain_1 (u1_incsp_1 X0) X2 X3) X4) \Rightarrow ((r1_incsp_1 X0 X1 X4) \vee \\ & ((X2 = X3) \vee (k3_incsp_1 X0 X1 X4 = k2_incsp_1 X0 X2 X3 X1)))))))))) \end{aligned}$$