

t98_scmfsa_2

(TMYsgDpSiFszr9wuZe79XfEkEw9iEkxftRi)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $k1_ami_3 : \iota$ be given. Let $k1_scmfsa_2 : \iota$ be given. Let $v2_extpro_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $np_3 : \iota$ be given. Let $k3_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_ami_2 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_ami_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_ami_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ami_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_ami_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_ami_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k7_ami_3 : \iota \Rightarrow \iota$ be given. Let $k8_ami_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_ami_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(m1_subset_1 X0 (u1_compos_1 k1_ami_3)) \Leftrightarrow (\neg(X0 \neq k3_xtuple_0 \\
 & \quad k6_numbers k1_xboole_0 k1_xboole_0) \wedge ((\forall X1.((v1_ami_2 \\
 & \quad X1) \wedge (m1_subset_1 X1 (u1_struct_0 k1_ami_3))) \Rightarrow (\forall X2.((\\
 v1_ami_2 X2) \wedge (m1_subset_1 X2 (u1_struct_0 k1_ami_3))) \Rightarrow (X0 \neq k2_ami_3 \\
 & \quad X1 X2))) \wedge ((\forall X1.((v1_ami_2 X1) \wedge (m1_subset_1 X1 (u1_struct_0 \\
 & \quad k1_ami_3))) \Rightarrow (\forall X2.((v1_ami_2 X2) \wedge (m1_subset_1 X2 (u1_struct_0 \\
 & \quad k1_ami_3))) \Rightarrow (X0 \neq k3_ami_3 X1 X2))) \wedge ((\forall X1.((v1_ami_2 X1) \wedge \\
 & \quad (m1_subset_1 X1 (u1_struct_0 k1_ami_3))) \Rightarrow (\forall X2.((v1_ami_2 \\
 & \quad X2) \wedge (m1_subset_1 X2 (u1_struct_0 k1_ami_3))) \Rightarrow (X0 \neq k4_ami_3 X1 \\
 & \quad X2))) \wedge ((\forall X1.((v1_ami_2 X1) \wedge (m1_subset_1 X1 (u1_struct_0 \\
 & \quad k1_ami_3))) \Rightarrow (\forall X2.((v1_ami_2 X2) \wedge (m1_subset_1 X2 (u1_struct_0 \\
 & \quad k1_ami_3))) \Rightarrow (X0 \neq k5_ami_3 X1 X2))) \wedge ((\forall X1.((v1_ami_2 X1) \wedge \\
 & \quad (m1_subset_1 X1 (u1_struct_0 k1_ami_3))) \Rightarrow (\forall X2.((v1_ami_2 \\
 & \quad X2) \wedge (m1_subset_1 X2 (u1_struct_0 k1_ami_3))) \Rightarrow (X0 \neq k6_ami_3 X1 \\
 & \quad X2))) \wedge ((\forall X1.(v7_ordinal1 X1) \Rightarrow (X0 \neq k7_ami_3 X1)) \wedge ((\forall X1. \\
 & \quad ((v1_ami_2 X1) \wedge (m1_subset_1 X1 (u1_struct_0 k1_ami_3))) \Rightarrow (\forall X2. \\
 & \quad (v7_ordinal1 X2) \Rightarrow (X0 \neq k8_ami_3 X2 X1))) \wedge (\forall X1.((v1_ami_2 \\
 & \quad X1) \wedge (m1_subset_1 X1 (u1_struct_0 k1_ami_3))) \Rightarrow (\forall X2.(v7_ordinal1 \\
 & \quad X2) \Rightarrow (X0 \neq k9_ami_3 X2 X1))))))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (u1_compos_1 k1_ami_3)) \Rightarrow ((X0 = k3_xtuple_0 k6_numbers k1_xboole_0 k1_xboole_0) \Rightarrow (v2_extpro_1 X0 np_2 k1_ami_3)) \quad (2)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (u1_compos_1 k1_scmfsa_2)) \Rightarrow ((v2_extpro_1 X0 np_3 k1_scmfsa_2) \Rightarrow (X0 = k3_xtuple_0 k6_numbers k1_xboole_0 k1_xboole_0)) \quad (3)$$

Theorem 1

$$\forall X0.(m1_subset_1 X0 (u1_compos_1 k1_ami_3)) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_compos_1 k1_scmfsa_2)) \Rightarrow (\neg(X0 = X1) \wedge ((\neg v2_extpro_1 X0 np_2 k1_ami_3) \wedge (v2_extpro_1 X1 np_3 k1_scmfsa_2))))$$