

t34_sf_mastr

(TMKMF16gw2mWbAEhx3nH1qznnR2t2hTuV48)

October 27, 2020

Let $v1_ami_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_scmf_sa_2 : \iota$ be given. Let $m1_scmf_sa_2 : \iota \Rightarrow o$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $k16_scmf_sa_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_scmf_sa_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_sf_mastr : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k14_scmf_sa_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15_scmf_sa_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_compos_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_12 : \iota$ be given. Let $np_11 : \iota$ be given. Let $k5_finsub_1 : \iota \Rightarrow \iota$ be given. Let $k3_scmf_sa_2 : \iota$ be given. Let $np_9 : \iota$ be given. Let $np_10 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k3_scmf_sa_1 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_ami_2 X0) \wedge (m1_subset_1 X0 (u1_struct_0 k1_scmf_sa_2))) \Rightarrow \\ & (\forall X1.((v1_ami_2 X1) \wedge (m1_subset_1 X1 (u1_struct_0 k1_scmf_sa_2))) \Rightarrow \\ & (\forall X2.(m1_scmf_sa_2 X2) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_compos_1 \\ & k1_scmf_sa_2)) \Rightarrow (((X3 = k14_scmf_sa_2 X0 X1 X2) \vee (X3 = k15_scmf_sa_2 \\ & X0 X1 X2)) \Rightarrow (k3_sf_mastr X3 = k1_tarski X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_scmf_sa_2 X0) \Rightarrow (\forall X1.((v1_ami_2 X1) \wedge (m1_subset_1 \\ & X1 (u1_struct_0 k1_scmf_sa_2))) \Rightarrow (k2_compos_0 (u1_compos_1 k1_scmf_sa_2) \\ & (k17_scmf_sa_2 X1 X0) = np_12)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_scmf_sa_2 X0) \Rightarrow (\forall X1.((v1_ami_2 X1) \wedge (m1_subset_1 \\ & X1 (u1_struct_0 k1_scmf_sa_2))) \Rightarrow (k2_compos_0 (u1_compos_1 k1_scmf_sa_2) \\ & (k16_scmf_sa_2 X1 X0) = np_11)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_compos_1 k1_scmf_sa_2)) \Rightarrow (m1_subset_1 \\ & (k3_sf_mastr X0) (k5_finsub_1 k3_scmf_sa_2)) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((v1_ami_2 X0) \wedge (m1_subset_1 \\ & X0 (u1_struct_0 k1_scmfsa_2))) \wedge (((v1_ami_2 X1) \wedge (m1_subset_1 \\ & X1 (u1_struct_0 k1_scmfsa_2))) \wedge (m1_scmfsa_2 X2))) \Rightarrow (m1_subset_1 \\ & (k14_scmfsa_2 X0 X1 X2) (u1_compos_1 k1_scmfsa_2)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 (u1_compos_1 k1_scmfsa_2)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k5_finsub_1 k3_scmfsa_2)) \Rightarrow (((k2_compos_0 \\ & (u1_compos_1 k1_scmfsa_2) X0 = np_9) \vee (k2_compos_0 (u1_compos_1 \\ & k1_scmfsa_2) X0 = np_10)) \Rightarrow ((X1 = k3_sf_mastr X0) \Leftrightarrow (\exists X2. \\ & ((v1_ami_2 X2) \wedge (m1_subset_1 X2 (u1_struct_0 k1_scmfsa_2)))) \wedge \\ & (\exists X3. ((v1_ami_2 X3) \wedge (m1_subset_1 X3 (u1_struct_0 k1_scmfsa_2)))) \wedge \\ & (\exists X4. (m1_scmfsa_2 X4) \wedge (((X0 = k14_scmfsa_2 X3 X2 X4) \vee (X0 = \\ & k15_scmfsa_2 X3 X2 X4)) \wedge (X1 = k1_tarski X4)))))) \wedge (((k2_compos_0 \\ & (u1_compos_1 k1_scmfsa_2) X0 = np_11) \vee (k2_compos_0 (u1_compos_1 \\ & k1_scmfsa_2) X0 = np_12)) \Rightarrow ((X1 = k3_sf_mastr X0) \Leftrightarrow (\exists X2. \\ & ((v1_ami_2 X2) \wedge (m1_subset_1 X2 (u1_struct_0 k1_scmfsa_2)))) \wedge \\ & (\exists X3. (m1_scmfsa_2 X3) \wedge (((X0 = k16_scmfsa_2 X2 X3) \vee (X0 = \\ & k17_scmfsa_2 X2 X3)) \wedge (X1 = k1_tarski X3)))))) \wedge (\neg (k2_compos_0 \\ & (u1_compos_1 k1_scmfsa_2) X0 \neq np_9) \wedge ((k2_compos_0 (u1_compos_1 \\ & k1_scmfsa_2) X0 \neq np_10) \wedge ((k2_compos_0 (u1_compos_1 k1_scmfsa_2) \\ & X0 \neq np_11) \wedge ((k2_compos_0 (u1_compos_1 k1_scmfsa_2) X0 \neq np_12) \wedge \\ & (\neg (X1 = k3_sf_mastr X0) \Leftrightarrow (X1 = k1_xboole_0)))))))))) \end{aligned} \quad (6)$$

Assume the following.

$$k3_scmfsa_2 = k3_scmfsa_1 \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v1_ami_2 X0) \wedge (m1_subset_1 X0 (u1_struct_0 k1_scmfsa_2))) \Rightarrow \\ & (\forall X1. (m1_scmfsa_2 X1) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_compos_1 \\ & k1_scmfsa_2)) \Rightarrow (((X2 = k16_scmfsa_2 X0 X1) \vee (X2 = k17_scmfsa_2 X0 \\ & X1)) \Rightarrow (k3_sf_mastr X2 = k1_tarski X1)))) \end{aligned}$$