

t41_sf_mastr (TMRdbgze- fwvgFq7A6QkhnpWCwb1qW1tVSDg)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $k1_scmf_sa_2 : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_afinsq_1 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k4_sf_mastr : \iota \Rightarrow \iota$ be given. Let $k6_compos_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_compos_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k61_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $l1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_compos_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_3 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v5_relat_1 \\ & X0 (u1_compos_1 k1_scmf_sa_2)) \wedge ((v1_funct_1 X0) \wedge (v1_finset_1 \\ & X0)))) \Rightarrow (\forall X1.(m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow \\ & (k4_sf_mastr X0 = k4_sf_mastr (k5_compos_1 k1_scmf_sa_2 X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v5_relat_1 \\ & X0 (u1_compos_1 k1_scmf_sa_2)) \wedge ((v1_funct_1 X0) \wedge (v1_finset_1 \\ & X0)))) \Rightarrow (\forall X1.(m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow \\ & (k4_sf_mastr X0 = k4_sf_mastr (k61_valued_1 X0 X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$(\neg v1_xboole_0 \ k4_ordinal1) \wedge (v3_ordinal1 \ k4_ordinal1) \quad (5)$$

Assume the following.

$$\neg v1_xboole_0 \ k1_numbers \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (l1_extpro_1 \ X1 \ X0) \Rightarrow ((l1_memstr_0 \ X1 \ X0) \wedge (l1_compos_1 \ X1)) \quad (7)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((l1_compos_1 \ X0) \wedge (((v1_relat_1 \\ & \ X1) \wedge ((v4_relat_1 \ X1 \ k5_numbers) \wedge ((v5_relat_1 \ X1 \ (u1_compos_1 \\ & \ X0)) \wedge ((v1_funct_1 \ X1) \wedge (v1_finset_1 \ X1)))))) \wedge (v7_ordinal1 \ X2))) \Rightarrow \\ & ((v1_relat_1 \ (k5_compos_1 \ X0 \ X1 \ X2)) \wedge ((v4_relat_1 \ (k5_compos_1 \\ & \ X0 \ X1 \ X2) \ k5_numbers) \wedge ((v5_relat_1 \ (k5_compos_1 \ X0 \ X1 \ X2) \ (u1_compos_1 \\ & \ X0)) \wedge ((v1_funct_1 \ (k5_compos_1 \ X0 \ X1 \ X2)) \wedge (v1_finset_1 \ (k5_compos_1 \\ & \ X0 \ X1 \ X2))))))) \end{aligned} \quad (9)$$

Assume the following.

$$(v1_extpro_1 \ k1_scmf_sa_2 \ np_3) \wedge (l1_extpro_1 \ k1_scmf_sa_2 \ np_3) \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_compos_1 \ X0) \Rightarrow (\forall X1. ((v1_relat_1 \ X1) \wedge ((\\ & \ v4_relat_1 \ X1 \ k5_numbers) \wedge ((v5_relat_1 \ X1 \ (u1_compos_1 \ X0)) \wedge \\ & \ ((v1_funct_1 \ X1) \wedge (v1_finset_1 \ X1)))))) \Rightarrow (\forall X2. (v7_ordinal1 \\ & \ X2) \Rightarrow (k6_compos_1 \ X0 \ X1 \ X2 = k61_valued_1 \ (k5_compos_1 \ X0 \ X1 \ X2) \ X2))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0. (m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \quad (12)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v1_relat_1 \ X0) \wedge ((v4_relat_1 \ X0 \ k5_numbers) \wedge ((v5_relat_1 \\ & \ X0 \ (u1_compos_1 \ k1_scmf_sa_2)) \wedge ((v1_funct_1 \ X0) \wedge ((\neg v1_xboole_0 \\ & \ X0) \wedge ((v1_finset_1 \ X0) \wedge (v1_afinsq_1 \ X0))))))) \Rightarrow (\forall X1. (\\ & \ m2_subset_1 \ X1 \ k1_numbers \ k5_numbers) \Rightarrow (k4_sf_mastr \ X0 = k4_sf_mastr \\ & \ (k6_compos_1 \ k1_scmf_sa_2 \ X0 \ X1))) \end{aligned}$$