

t75_scmfsa8c
(TMLa5uyvZsiMqyQ1idJuC4qdqVD7xqCYyQB)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. 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 $k1_scmfsa_2 : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_afinsq_1 : \iota \Rightarrow o$ be given. Let $k2_compos_1 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_scmfsa8c : \iota \Rightarrow \iota$ 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 $v1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_3 : \iota$ be given. Let $v2_compos_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (l1_extpro_1 X1 X0) \Rightarrow ((l1_memstr_0 X1 X0) \wedge (l1_compos_1 X1)) \quad (1)$$

Assume the following.

$$(v1_extpro_1 k1_scmfsa_2 np_3) \wedge (l1_extpro_1 k1_scmfsa_2 np_3) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v1_xboole_0 X0) \wedge ((v1_relat_1 X0) \wedge ((v4_relat_1 \\ &X0 k5_numbers) \wedge ((v5_relat_1 X0 (u1_compos_1 k1_scmfsa_2)) \wedge \\ &(v1_funct_1 X0) \wedge ((v1_finset_1 X0) \wedge (v1_afinsq_1 X0)))))) \Rightarrow (\\ &(\neg v1_xboole_0 (k1_scmfsa8c X0)) \wedge ((v1_relat_1 (k1_scmfsa8c X0)) \wedge \\ &((v4_relat_1 (k1_scmfsa8c X0) k5_numbers) \wedge ((v5_relat_1 (k1_scmfsa8c \\ &X0) (u1_compos_1 k1_scmfsa_2)) \wedge ((v1_funct_1 (k1_scmfsa8c X0)) \wedge \\ &((v1_finset_1 (k1_scmfsa8c X0)) \wedge ((v1_afinsq_1 (k1_scmfsa8c \\ &X0)) \wedge (v2_compos_1 (k1_scmfsa8c X0) k1_scmfsa_2)))))))))) \quad (3) \end{aligned}$$

Assume the following.

$$\begin{aligned} \forall X0. (l1_compos_1 X0) \Rightarrow (\forall X1. ((v1_relat_1 X1) \wedge (\\ v5_relat_1 X1 (u1_compos_1 X0)) \wedge (v1_funct_1 X1))) \Rightarrow ((v2_compos_1 \\ X1 X0) \Leftrightarrow (\neg k2_compos_1 X0 \in k10_xtuple_0 X1)) \quad (4) \end{aligned}$$

Theorem 1

$$\forall X0.((\neg v1_xboole_0 X0) \wedge ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v5_relat_1 X0 (u1_compos_1 k1_scmfsa_2)) \wedge (v1_funct_1 X0) \wedge ((v1_finset_1 X0) \wedge (v1_afinsq_1 X0))))))) \Rightarrow (\neg k2_compos_1 k1_scmfsa_2 \in k10_xtuple_0 (k1_scmfsa8c X0))$$