

t23_scmpds_7

(TMRd5r2kEM3evRTZUggegNYguEhQzckXY9A)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_scmpds_2 : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v5_funct_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_afinsq_1 : \iota \Rightarrow o$ be given. Let $r2_scmpds_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_scmpds_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_scmpds_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_extpro_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_compos_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_extpro_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_setfam_1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_extpro_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_extpro_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ 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. Assume the following.

$$\begin{aligned}
& \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v5_relat_1 \\
& X0 (u1_compos_1 k1_scmpds_2)) \wedge ((v1_funct_1 X0) \wedge (v1_partfun1 \\
& X0 k5_numbers)))))) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v4_relat_1 \\
& X1 (u1_struct_0 k1_scmpds_2)) \wedge ((v1_funct_1 X1) \wedge ((v5_funct_1 \\
& X1 (k2_memstr_0 np_2 k1_scmpds_2)) \wedge (v1_partfun1 X1 (u1_struct_0 \\
& k1_scmpds_2)))))) \Rightarrow (\forall X2.((\neg v1_xboole_0 X2) \wedge ((v1_relat_1 \\
& X2) \wedge ((v4_relat_1 X2 k5_numbers) \wedge ((v5_relat_1 X2 (u1_compos_1 \\
& k1_scmpds_2)) \wedge ((v1_funct_1 X2) \wedge ((v1_finset_1 X2) \wedge (v1_afinsq_1 \\
& X2)))))) \Rightarrow (\forall X3.((\neg v1_xboole_0 X3) \wedge ((v1_relat_1 X3) \wedge \\
& ((v4_relat_1 X3 k5_numbers) \wedge ((v5_relat_1 X3 (u1_compos_1 k1_scmpds_2)) \wedge \\
& ((v1_funct_1 X3) \wedge ((v1_finset_1 X3) \wedge (v1_afinsq_1 X3)))))) \Rightarrow \\
& ((r1_scmpds_6 X2 X1 X0) \Leftrightarrow (r1_scmpds_6 X2 (k8_memstr_0 np_2 k1_scmpds_2 \\
& X1) (k1_funct_4 X0 X3))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v5_relat_1 \\
& X0 (u1_compos_1 k1_scmpds_2)) \wedge ((v1_funct_1 X0) \wedge (v1_partfun1 \\
& X0 k5_numbers)))))) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v4_relat_1 \\
& X1 k5_numbers) \wedge ((v5_relat_1 X1 (u1_compos_1 k1_scmpds_2)) \wedge (\\
& (v1_funct_1 X1) \wedge (v1_partfun1 X1 k5_numbers)))))) \Rightarrow (\forall X2. \\
& ((v1_relat_1 X2) \wedge ((v4_relat_1 X2 (u1_struct_0 k1_scmpds_2)) \wedge \\
& ((v1_funct_1 X2) \wedge ((v5_funct_1 X2 (k2_memstr_0 np_2 k1_scmpds_2)) \wedge \\
& (v1_partfun1 X2 (u1_struct_0 k1_scmpds_2)))))) \Rightarrow (\forall X3. \\
& ((v1_relat_1 X3) \wedge ((v4_relat_1 X3 (u1_struct_0 k1_scmpds_2)) \wedge \\
& ((v1_funct_1 X3) \wedge ((v5_funct_1 X3 (k2_memstr_0 np_2 k1_scmpds_2)) \wedge \\
& (v1_partfun1 X3 (u1_struct_0 k1_scmpds_2)))))) \Rightarrow (\forall X4. \\
& ((\neg v1_xboole_0 X4) \wedge ((v1_relat_1 X4) \wedge ((v4_relat_1 X4 k5_numbers) \wedge \\
& ((v5_relat_1 X4 (u1_compos_1 k1_scmpds_2)) \wedge ((v1_funct_1 X4) \wedge \\
& ((v1_finset_1 X4) \wedge (v1_afinsq_1 X4)))))) \Rightarrow (((k6_memstr_0 np_2 \\
& k1_scmpds_2 X2 = k6_memstr_0 np_2 k1_scmpds_2 X3) \wedge ((r1_scmpds_6 \\
& X4 X2 X0) \wedge (r2_scmpds_6 X4 X2 X0))) \Rightarrow ((r1_scmpds_6 X4 X3 X1) \wedge (r2_scmpds_6 \\
& X4 X3 X1))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v1_xboole_0 X0) \wedge (\neg v1_setfam_1 X0)) \Rightarrow (\forall X1. \\
& ((\neg v2_struct_0 X1) \wedge ((v2_memstr_0 X1 X0) \wedge ((v3_memstr_0 X1 X0) \wedge \\
& ((v3_extpro_1 X1 X0) \wedge (l1_extpro_1 X1 X0)))))) \Rightarrow (\forall X2.((v1_relat_1 \\
& X2) \wedge ((v4_relat_1 X2 k5_numbers) \wedge ((v5_relat_1 X2 (u1_compos_1 \\
& X1)) \wedge (v1_funct_1 X2)))))) \Rightarrow (\forall X3.((v1_relat_1 X3) \wedge ((v4_relat_1 \\
& X3 (u1_struct_0 X1)) \wedge ((v1_funct_1 X3) \wedge ((v5_funct_1 X3 (k2_memstr_0 \\
& X0 X1)) \wedge (v1_partfun1 X3 (u1_struct_0 X1)))))) \Rightarrow ((r1_extpro_1 \\
& X0 X1 X2 X3) \Rightarrow (k6_extpro_1 X0 X1 X2 X3 = k5_extpro_1 X0 X1 X2 X3 (k8_extpro_1 \\
& X0 X1 X2 X3))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v5_relat_1 \\
& X0 (u1_compos_1 k1_scmpds_2)) \wedge ((v1_funct_1 X0) \wedge (v1_partfun1 \\
& X0 k5_numbers)))))) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v4_relat_1 \\
& X1 (u1_struct_0 k1_scmpds_2)) \wedge ((v1_funct_1 X1) \wedge ((v5_funct_1 \\
& X1 (k2_memstr_0 np_2 k1_scmpds_2)) \wedge (v1_partfun1 X1 (u1_struct_0 \\
& k1_scmpds_2)))))) \Rightarrow (\forall X2.((\neg v1_xboole_0 X2) \wedge ((v1_relat_1 \\
& X2) \wedge ((v4_relat_1 X2 k5_numbers) \wedge ((v5_relat_1 X2 (u1_compos_1 \\
& k1_scmpds_2)) \wedge ((v1_funct_1 X2) \wedge ((v1_finset_1 X2) \wedge (v1_afinsq1 \\
& X2)))))) \Rightarrow ((r1_scmpds_6 X2 X1 X0) \Leftrightarrow (r1_scmpds_6 X2 (k8_memstr_0 \\
& np_2 k1_scmpds_2 X1) X0)))
\end{aligned} \tag{4}$$

Assume the following.

$$((v2_xreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \tag{5}$$

Assume the following.

$$\neg v1_xboole_0 np_2 \tag{6}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{7}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. (((v1_relat_1 X1) \wedge ((v4_relat_1 \\
& X1 X0) \wedge ((v1_funct_1 X1) \wedge (v1_partfun1 X1 X0)))) \wedge ((v1_relat_1 \\
& X2) \wedge ((v4_relat_1 X2 X0) \wedge (v1_funct_1 X2)))) \Rightarrow ((v1_relat_1 (k1_funct_4 \\
& X1 X2)) \wedge ((v4_relat_1 (k1_funct_4 X1 X2) X0) \wedge ((v1_funct_1 (k1_funct_4 \\
& X1 X2)) \wedge (v1_partfun1 (k1_funct_4 X1 X2) X0))))
\end{aligned} \tag{8}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. (((v1_relat_1 X1) \wedge ((v4_relat_1 \\
& X1 X0) \wedge (v1_funct_1 X1))) \wedge ((v1_relat_1 X2) \wedge ((v4_relat_1 X2 X0) \wedge \\
& (v1_funct_1 X2)))) \Rightarrow ((v1_relat_1 (k1_funct_4 X1 X2)) \wedge ((v4_relat_1 \\
& (k1_funct_4 X1 X2) X0) \wedge (v1_funct_1 (k1_funct_4 X1 X2))))
\end{aligned} \tag{9}$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \quad (10)$$

Assume the following.

$$(v1_extpro_1 k1_scmpds_2 np_2) \wedge (v3_extpro_1 k1_scmpds_2 np_2) \quad (11)$$

Assume the following.

$$(v2_memstr_0 k1_scmpds_2 np_2) \wedge ((v3_memstr_0 k1_scmpds_2 np_2) \wedge (v1_extpro_1 k1_scmpds_2 np_2)) \quad (12)$$

Assume the following.

$$(\neg v2_struct_0 k1_scmpds_2) \wedge (v1_extpro_1 k1_scmpds_2 np_2) \quad (13)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1_setfam_1 X0) \wedge (((\neg v2_struct_0 \\ & X1) \wedge ((v2_memstr_0 X1 X0) \wedge ((v3_memstr_0 X1 X0) \wedge (l1_memstr_0 X1 \\ & X0)))) \wedge ((v1_relat_1 X2) \wedge ((v4_relat_1 X2 (u1_struct_0 X1)) \wedge \\ & (v1_funct_1 X2) \wedge ((v5_funct_1 X2 (k2_memstr_0 X0 X1)) \wedge (v1_partfun1 \\ & X2 (u1_struct_0 X1)))))) \Rightarrow ((v1_relat_1 (k8_memstr_0 X0 X1 X2)) \wedge \\ & ((v4_relat_1 (k8_memstr_0 X0 X1 X2) (u1_struct_0 X1)) \wedge ((v1_funct_1 \\ & (k8_memstr_0 X0 X1 X2)) \wedge ((v5_funct_1 (k8_memstr_0 X0 X1 X2) (k2_memstr_0 \\ & X0 X1)) \wedge (v1_partfun1 (k8_memstr_0 X0 X1 X2) (u1_struct_0 X1)))))) \end{aligned} \quad (14)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((l1_compos_1 X0) \wedge ((v1_relat_1 X1) \wedge ((\\ & v4_relat_1 X1 k5_numbers) \wedge ((v5_relat_1 X1 (u1_compos_1 X0)) \wedge \\ & ((v1_funct_1 X1) \wedge ((v1_finset_1 X1) \wedge (v1_afinsq_1 X1)))))) \Rightarrow \\ & ((\neg v1_xboole_0 (k10_compos_1 X0 X1)) \wedge ((v1_relat_1 (k10_compos_1 \\ & X0 X1)) \wedge ((v4_relat_1 (k10_compos_1 X0 X1) k5_numbers) \wedge ((v5_relat_1 \\ & (k10_compos_1 X0 X1) (u1_compos_1 X0)) \wedge ((v1_funct_1 (k10_compos_1 \\ & X0 X1)) \wedge ((v1_finset_1 (k10_compos_1 X0 X1)) \wedge (v1_afinsq_1 (k10_compos_1 \\ & X0 X1)))))) \end{aligned} \quad (15)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((v1_relat_1 X1) \wedge ((v5_relat_1 \\ & X1 X0) \wedge (v1_funct_1 X1))) \wedge ((v1_relat_1 X2) \wedge ((v5_relat_1 X2 X0) \wedge \\ & (v1_funct_1 X2)))) \Rightarrow ((v1_relat_1 (k1_funct_4 X1 X2)) \wedge ((v5_relat_1 \\ & (k1_funct_4 X1 X2) X0) \wedge (v1_funct_1 (k1_funct_4 X1 X2)))) \end{aligned} \quad (16)$$

Assume the following.

$$\forall X0. \forall X1. (l1_extpro_1 X1 X0) \Rightarrow ((l1_memstr_0 X1 X0) \wedge (l1_compos_1 X1)) \quad (17)$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. (((\neg v1_xboole_0 X0) \wedge (v1_relat_1 \\
& X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v5_relat_1 X0 (u1_compos_1 \\
& k1_scmpds_2)) \wedge ((v1_funct_1 X0) \wedge ((v1_finset_1 X0) \wedge (v1_afinsq_1 \\
& X0)))))) \wedge ((v1_relat_1 X1) \wedge ((v4_relat_1 X1 (u1_struct_0 k1_scmpds_2)) \wedge \\
& ((v1_funct_1 X1) \wedge ((v5_funct_1 X1 (k2_memstr_0 np_2 k1_scmpds_2)) \wedge \\
& (v1_partfun1 X1 (u1_struct_0 k1_scmpds_2)))))) \wedge (v1_relat_1 \\
& X2) \wedge ((v4_relat_1 X2 k5_numbers) \wedge ((v5_relat_1 X2 (u1_compos_1 \\
& k1_scmpds_2)) \wedge ((v1_funct_1 X2) \wedge (v1_partfun1 X2 k5_numbers)))))) \Rightarrow \\
& ((v1_relat_1 (k6_scmpds_4 X0 X1 X2)) \wedge ((v4_relat_1 (k6_scmpds_4 \\
& X0 X1 X2) (u1_struct_0 k1_scmpds_2)) \wedge ((v1_funct_1 (k6_scmpds_4 \\
& X0 X1 X2)) \wedge ((v5_funct_1 (k6_scmpds_4 X0 X1 X2) (k2_memstr_0 np_2 \\
& k1_scmpds_2)) \wedge (v1_partfun1 (k6_scmpds_4 X0 X1 X2) (u1_struct_0 \\
& k1_scmpds_2))))))
\end{aligned} \tag{18}$$

Assume the following.

$$(v1_extpro_1 k1_scmpds_2 np_2) \wedge (l1_extpro_1 k1_scmpds_2 np_2) \tag{19}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. (((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \wedge ((\\
& v1_relat_1 X1) \wedge (v1_funct_1 X1))) \Rightarrow ((v1_relat_1 (k1_funct_4 X0 \\
& X1)) \wedge (v1_funct_1 (k1_funct_4 X0 X1)))
\end{aligned} \tag{20}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. (((l1_compos_1 X0) \wedge ((v1_relat_1 X1) \wedge ((\\
& v4_relat_1 X1 k5_numbers) \wedge ((v5_relat_1 X1 (u1_compos_1 X0)) \wedge \\
& ((v1_funct_1 X1) \wedge ((v1_finset_1 X1) \wedge (v1_afinsq_1 X1)))))) \Rightarrow \\
& ((v1_relat_1 (k10_compos_1 X0 X1)) \wedge ((v4_relat_1 (k10_compos_1 \\
& X0 X1) k5_numbers) \wedge ((v5_relat_1 (k10_compos_1 X0 X1) (u1_compos_1 \\
& X0)) \wedge ((v1_funct_1 (k10_compos_1 X0 X1)) \wedge (v1_finset_1 (k10_compos_1 \\
& X0 X1))))))
\end{aligned} \tag{21}$$

Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v1_relat_1 X0) \wedge ((v4_relat_1 \\
& X0 k5_numbers) \wedge ((v5_relat_1 X0 (u1_compos_1 k1_scmpds_2)) \wedge (\\
& (v1_funct_1 X0) \wedge ((v1_finset_1 X0) \wedge (v1_afinsq_1 X0)))))) \Rightarrow (\\
& \forall X1. ((v1_relat_1 X1) \wedge ((v4_relat_1 X1 (u1_struct_0 k1_scmpds_2)) \wedge \\
& ((v1_funct_1 X1) \wedge ((v5_funct_1 X1 (k2_memstr_0 np_2 k1_scmpds_2)) \wedge \\
& (v1_partfun1 X1 (u1_struct_0 k1_scmpds_2)))))) \Rightarrow (\forall X2. \\
& ((v1_relat_1 X2) \wedge ((v4_relat_1 X2 k5_numbers) \wedge ((v5_relat_1 X2 \\
& (u1_compos_1 k1_scmpds_2)) \wedge ((v1_funct_1 X2) \wedge (v1_partfun1 X2 \\
& k5_numbers)))))) \Rightarrow (k6_scmpds_4 X0 X1 X2 = k6_extpro_1 np_2 k1_scmpds_2 \\
& (k1_funct_4 X2 (k10_compos_1 k1_scmpds_2 X0) X1))
\end{aligned} \tag{22}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v1_xboole_0 X0) \wedge ((v1_relat_1 X0) \wedge ((v4_relat_1 \\
& X0 k5_numbers) \wedge ((v5_relat_1 X0 (u1_compos_1 k1_scmpds_2)) \wedge \\
& (v1_funct_1 X0) \wedge ((v1_finset_1 X0) \wedge (v1_afinsq_1 X0)))))) \Rightarrow (\\
& \forall X1.((v1_relat_1 X1) \wedge ((v4_relat_1 X1 (u1_struct_0 k1_scmpds_2)) \wedge \\
& ((v1_funct_1 X1) \wedge ((v5_funct_1 X1 (k2_memstr_0 np_2 k1_scmpds_2)) \wedge \\
& (v1_partfun1 X1 (u1_struct_0 k1_scmpds_2)))))) \Rightarrow (\forall X2. \\
& ((v1_relat_1 X2) \wedge ((v4_relat_1 X2 k5_numbers) \wedge ((v5_relat_1 X2 \\
& (u1_compos_1 k1_scmpds_2)) \wedge ((v1_funct_1 X2) \wedge (v1_partfun1 X2 \\
& k5_numbers)))))) \Rightarrow ((r2_scmpds_6 X0 X1 X2) \Leftrightarrow (r1_extpro_1 np_2 k1_scmpds_2 \\
& (k1_funct_4 X2 (k10_compos_1 k1_scmpds_2 X0) (k8_memstr_0 np_2 \\
& k1_scmpds_2 X1))))))
\end{aligned} \tag{23}$$

Assume the following.

$$\forall X0.((v3_ordinal1 X0) \wedge (v1_finset_1 X0)) \Rightarrow (v7_ordinal1 X0) \tag{24}$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow (v3_ordinal1 X1)) \tag{25}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v1_finset_1 X0) \tag{26}$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0) \wedge (v7_ordinal1 X0)) \Rightarrow ((\neg v1_xboole_0 X0) \wedge ((v7_ordinal1 X0) \wedge (\neg v1_setfam_1 X0))) \tag{27}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 (u1_struct_0 k1_scmpds_2)) \wedge \\
& ((v1_funct_1 X0) \wedge ((v5_funct_1 X0 (k2_memstr_0 np_2 k1_scmpds_2)) \wedge \\
& (v1_partfun1 X0 (u1_struct_0 k1_scmpds_2)))))) \Rightarrow (\forall X1. \\
& ((v1_relat_1 X1) \wedge ((v4_relat_1 X1 k5_numbers) \wedge ((v5_relat_1 X1 \\
& (u1_compos_1 k1_scmpds_2)) \wedge ((v1_funct_1 X1) \wedge (v1_partfun1 X1 \\
& k5_numbers)))))) \Rightarrow (\forall X2. ((\neg v1_xboole_0 X2) \wedge ((v1_relat_1 \\
& X2) \wedge ((v4_relat_1 X2 k5_numbers) \wedge ((v5_relat_1 X2 (u1_compos_1 \\
& k1_scmpds_2)) \wedge ((v1_funct_1 X2) \wedge ((v1_finset_1 X2) \wedge (v1_afinsq_1 \\
& X2))))))) \Rightarrow (\forall X3. ((\neg v1_xboole_0 X3) \wedge ((v1_relat_1 X3) \wedge \\
& ((v4_relat_1 X3 k5_numbers) \wedge ((v5_relat_1 X3 (u1_compos_1 k1_scmpds_2)) \wedge \\
& ((v1_funct_1 X3) \wedge ((v1_finset_1 X3) \wedge (v1_afinsq_1 X3))))))) \Rightarrow \\
& (((r2_scmpds_6 X2 X0 X1) \wedge ((r1_scmpds_6 X3 (k6_scmpds_4 X2 (k8_memstr_0 \\
& np_2 k1_scmpds_2 X0) X1) X1) \wedge (r2_scmpds_6 X3 (k6_scmpds_4 X2 (\\
& k8_memstr_0 np_2 k1_scmpds_2 X0) X1) X1))) \Rightarrow ((r1_scmpds_6 X3 (\\
& k5_extpro_1 np_2 k1_scmpds_2 (k1_funct_4 X1 (k10_compos_1 k1_scmpds_2 \\
& X2)) (k8_memstr_0 np_2 k1_scmpds_2 X0) (k8_extpro_1 np_2 k1_scmpds_2 \\
& (k1_funct_4 X1 (k10_compos_1 k1_scmpds_2 X2)) (k8_memstr_0 np_2 \\
& k1_scmpds_2 X0))) (k1_funct_4 X1 (k10_compos_1 k1_scmpds_2 X2))) \wedge \\
& (r2_scmpds_6 X3 (k5_extpro_1 np_2 k1_scmpds_2 (k1_funct_4 X1 \\
& (k10_compos_1 k1_scmpds_2 X2)) (k8_memstr_0 np_2 k1_scmpds_2 \\
& X0) (k8_extpro_1 np_2 k1_scmpds_2 (k1_funct_4 X1 (k10_compos_1 \\
& k1_scmpds_2 X2)) (k8_memstr_0 np_2 k1_scmpds_2 X0))) (k1_funct_4 \\
& X1 (k10_compos_1 k1_scmpds_2 X2))))))
\end{aligned}$$