

t25_mesfunc8

(TMJRPZ8PqBFcPYSuvT2A1t6Svw6g3jBesip)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k4_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_numbers : \iota$ be given. Let $v1_mesfunc8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_mesfunc5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_mesfunc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v10_mesfunc5 : \iota \Rightarrow o$ be given. Let $k3_mesfunc5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_mesfunc8 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_mesfunc8 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_supinf_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_mesfunc8 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_mesfunc5 : \iota \Rightarrow \iota$ be given. Let $k6_rinfsup2 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\
 & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
 & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 \\
 & X2 k5_numbers (k4_partfun1 X0 k7_numbers)) \wedge ((v1_mesfunc8 X2 X0 \\
 & k7_numbers) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\
 & (k4_partfun1 X0 k7_numbers)))))) \Rightarrow (\forall X3. (m2_subset_1 \\
 & X3 (k1_zfmisc_1 X0) X1) \Rightarrow (((k1_relset_1 X0 (k4_mesfunc5 X0 k7_numbers \\
 & X2 k6_numbers) = X3) \wedge (\forall X4. (v7_ordinal1 X4) \Rightarrow (r1_mesfunc1 \\
 & X0 X1 (k4_mesfunc5 X0 k7_numbers X2 X4) X3))) \Rightarrow (r1_mesfunc1 X0 X1 \\
 & (k5_mesfunc8 X0 X2) X3))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\
& (v1_funct_2 X1 k5_numbers (k4_partfun1 X0 k7_numbers)) \wedge (m1_subset_1 \\
& X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k4_partfun1 X0 k7_numbers)))))) \Rightarrow \\
& (\forall X2.(m1_subset_1 X2 X0) \Rightarrow (((X2 \in k1_relset_1 X0 (k7_mesfunc8 \\
& X0 X1)) \wedge (v10_mesfunc5 (k3_mesfunc5 X0 X1 X2))) \Rightarrow ((k12_supinf_2 \\
& (k7_mesfunc8 X0 X1) X2 = k12_supinf_2 (k6_mesfunc8 X0 X1) X2) \wedge (k12_supinf_2 \\
& (k7_mesfunc8 X0 X1) X2 = k12_supinf_2 (k5_mesfunc8 X0 X1) X2)))))) \\
& \tag{2}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((v1_funct_1 X1) \wedge \\
& (v1_funct_2 X1 k5_numbers (k4_partfun1 X0 k7_numbers)) \wedge (m1_subset_1 \\
& X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k4_partfun1 X0 k7_numbers)))))) \Rightarrow \\
& ((v1_funct_1 (k7_mesfunc8 X0 X1)) \wedge (m1_subset_1 (k7_mesfunc8 \\
& X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers)))) \\
& \tag{3}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((v1_funct_1 X1) \wedge \\
& (v1_funct_2 X1 k5_numbers (k4_partfun1 X0 k7_numbers)) \wedge (m1_subset_1 \\
& X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k4_partfun1 X0 k7_numbers)))))) \Rightarrow \\
& ((v1_funct_1 (k5_mesfunc8 X0 X1)) \wedge (m1_subset_1 (k5_mesfunc8 \\
& X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers)))) \\
& \tag{4}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\
& (v1_funct_2 X1 k5_numbers (k4_partfun1 X0 k7_numbers)) \wedge (m1_subset_1 \\
& X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k4_partfun1 X0 k7_numbers)))))) \Rightarrow \\
& (\forall X2.((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
& X0 k7_numbers)))) \Rightarrow ((X2 = k7_mesfunc8 X0 X1) \Leftrightarrow ((k1_relset_1 X0 X2 = \\
& k1_relset_1 X0 (k4_mesfunc5 X0 k7_numbers X1 k6_numbers)) \wedge (\forall X3. \\
& (m1_subset_1 X3 X0) \Rightarrow ((X3 \in k1_relset_1 X0 X2) \Rightarrow (k12_supinf_2 X2 \\
& X3 = k2_mesfunc5 (k3_mesfunc5 X0 X1 X3)))))) \\
& \tag{5}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\
& (v1_funct_2 X1 k5_numbers (k4_partfun1 X0 k7_numbers)) \wedge (m1_subset_1 \\
& X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k4_partfun1 X0 k7_numbers)))))) \Rightarrow \\
& (\forall X2.((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
& X0 k7_numbers)))) \Rightarrow ((X2 = k5_mesfunc8 X0 X1) \Leftrightarrow ((k1_relset_1 X0 X2 = \\
& k1_relset_1 X0 (k4_mesfunc5 X0 k7_numbers X1 k6_numbers)) \wedge (\forall X3. \\
& (m1_subset_1 X3 X0) \Rightarrow ((X3 \in k1_relset_1 X0 X2) \Rightarrow (k12_supinf_2 X2 \\
& X3 = k6_rinf_sup2 (k3_mesfunc5 X0 X1 X3)))))) \\
& \tag{6}
\end{aligned}$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 k5_numbers (k4_partfun1 X0 k7_numbers)) \wedge ((v1_mesfunc8 X2 X0 \\ & k7_numbers) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\ & (k4_partfun1 X0 k7_numbers)))))) \Rightarrow (\forall X3.(m2_subset_1 \\ & X3 (k1_zfmisc_1 X0) X1) \Rightarrow (((k1_reset_1 X0 (k4_mesfunc5 X0 k7_numbers \\ & X2 k6_numbers) = X3) \wedge ((\forall X4.(v7_ordinal1 X4) \Rightarrow (r1_mesfunc1 \\ & X0 X1 (k4_mesfunc5 X0 k7_numbers X2 X4) X3)) \wedge (\forall X4.(m1_subset_1 \\ & X4 X0) \Rightarrow ((X4 \in X3) \Rightarrow (v10_mesfunc5 (k3_mesfunc5 X0 X2 X4)))))) \Rightarrow (r1_mesfunc1 \\ & X0 X1 (k7_mesfunc8 X0 X2) X3)))) \end{aligned}$$