

t40_mesfunc5

(TMdG4FWT6cttzZJpwK21JXyd5UipQA1SgYL)

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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 $k7_numbers : \iota$ be given. Let $v10_valued_0 : \iota \Rightarrow o$ be given. Let $v6_supinf_2 : \iota \Rightarrow o$ be given. Let $v4_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_mesfunc2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_mesfunc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12_supinf_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_supinf_1 : \iota$ be given. Let $k1_supinf_1 : \iota$ be given. Let $v3_mesfunc5 : \iota \Rightarrow o$ be given. Let $v4_mesfunc5 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge (\\ & \quad m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers)))) \Rightarrow (\\ & \quad \forall X2. ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & \quad \quad X0 k7_numbers)))) \Rightarrow ((\forall X3. (X3 \in k9_subset_1 X0 (k1_relset_1 \\ & \quad \quad X0 X1) (k1_relset_1 X0 X2)) \Rightarrow ((r1_xxreal_0 (k12_supinf_2 X2 X3) \\ & \quad (k12_supinf_2 X1 X3)) \wedge ((\neg r1_xxreal_0 (k12_supinf_2 X2 X3) k2_supinf_1) \wedge \\ & \quad (\neg r1_xxreal_0 k1_supinf_1 (k12_supinf_2 X1 X3)))) \Rightarrow (v6_supinf_2 \\ & \quad \quad (k4_mesfunc1 X0 X1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge (\\ & \quad m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers)))) \Rightarrow (\\ & \quad \forall X2. ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & \quad \quad X0 k7_numbers)))) \Rightarrow (((v3_mesfunc5 X1) \wedge (v4_mesfunc5 X2)) \Rightarrow (k1_relset_1 \\ & \quad X0 (k4_mesfunc1 X0 X1 X2) = k9_subset_1 X0 (k1_relset_1 X0 X1) (k1_relset_1 \\ & \quad \quad X0 X2)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge (m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers)))) \Rightarrow ((r1_mesfunc2 \\ & X0 X1 X2) \Rightarrow ((v4_mesfunc5 X2) \wedge (v3_mesfunc5 X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge (\\ & m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers)))) \Rightarrow (\\ & (v4_mesfunc5 X1) \Leftrightarrow (\forall X2. \neg r1_xxreal_0 k1_supinf_1 (k12_supinf_2 \\ & X1 X2)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge (\\ & m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers)))) \Rightarrow (\\ & (v3_mesfunc5 X1) \Leftrightarrow (\forall X2. \neg r1_xxreal_0 (k12_supinf_2 X1 X2) \\ & k2_supinf_1))) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 X1 k7_numbers) \wedge ((v10_valued_0 X2) \wedge ((v6_supinf_2 X2) \wedge ((v4_measure1 \\ & X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers)))))) \Rightarrow \\ & (\forall X3.((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 k7_numbers)))) \Rightarrow (\forall X4.((v1_funct_1 X4) \wedge (m1_subset_1 \\ & X4 (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers)))) \Rightarrow (((r1_mesfunc2 \\ & X0 X1 X3) \wedge (r1_mesfunc2 X0 X1 X4) \wedge (\forall X5.(X5 \in k1_relset_1 \\ & X0 (k4_mesfunc1 X0 X3 X4) \Rightarrow (r1_xxreal_0 (k12_supinf_2 X4 X5) (k12_supinf_2 \\ & X3 X5)))))) \Rightarrow (v6_supinf_2 (k4_mesfunc1 X0 X3 X4)))))) \end{aligned}$$