

t27_mesfunc1

(TMG3pfeBdw9mzGptWtj9mTh8TfkhoELRTXM)

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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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_numbers : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $r1_mesfunc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_mesfunc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_measure6 : \iota \Rightarrow \iota$ be given. Let $v2_finsub_1 : \iota \Rightarrow o$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15_mesfunc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v3_measure1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_finsub_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v2_finsub_1 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \Rightarrow (\forall X2. \forall X3. ((X2 \in X1) \wedge (X3 \in X1)) \Rightarrow (k6_subset_1 \\ & X2 X3 \in X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 k7_numbers)))) \Rightarrow (\forall X2. \forall X3. (m1_subset_1 \\ & X3 k7_numbers) \Rightarrow ((r1_tarski X2 (k9_xtuple_0 X1)) \Rightarrow (k9_subset_1 \\ & X0 X2 (k15_mesfunc1 X0 X1 X3) = k6_subset_1 X2 (k9_subset_1 X0 X2 (\\ & k18_mesfunc1 X0 X1 X3)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_funct_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\ (k2_zfmisc_1 X0 k7_numbers))))\Rightarrow(\forall X2.\forall X3.(m1_subset_1 \\ X3 k7_numbers)\Rightarrow((r1_tarski X2 (k9_xtuple_0 X1))\Rightarrow(k9_subset_1 \\ X0 X2 (k18_mesfunc1 X0 X1 X3) = k6_subset_1 X2 (k9_subset_1 X0 X2 (\\ k15_mesfunc1 X0 X1 X3)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge((\neg v1_xboole_0 X1)\wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 X0))))\Rightarrow(\forall X2.(m2_subset_1 \\ X2 X0 X1)\Leftrightarrow(m1_subset_1 X2 X1)) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(m1_subset_1 (k1_measure6 X0) k7_numbers) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.((\neg v1_xboole_0 X1)\wedge \\ ((v1_prob_1 X1 X0)\wedge((v4_prob_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\ (k1_zfmisc_1 X0))))))\Rightarrow(\forall X2.((v1_funct_1 X2)\wedge(m1_subset_1 \\ X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers))))\Rightarrow(\forall X3.(\\ m2_subset_1 X3 (k1_zfmisc_1 X0) X1)\Rightarrow((r1_mesfunc1 X0 X1 X2 X3)\Leftrightarrow \\ (\forall X4.(v1_xreal_0 X4)\Rightarrow(k9_subset_1 X0 X3 (k15_mesfunc1 \\ X0 X2 (k1_measure6 X4) \in X1)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ X0)))\Rightarrow(((\neg v1_xboole_0 X1)\wedge((v1_prob_1 X1 X0)\wedge(v3_measure1 X1 \\ X0)))\Rightarrow((\neg v1_xboole_0 X1)\wedge(v1_finsub_1 X1))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(v1_xreal_0 X0) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ X0)))\Rightarrow(((v1_prob_1 X1 X0)\wedge(v4_prob_1 X1 X0))\Rightarrow(v3_measure1 X1 \\ X0)) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ X0))\Rightarrow(v1_xboole_0 X1)) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0)))\Rightarrow(((v1_finsub_1 X1)\wedge(v1_prob_1 X1 X0))\Rightarrow(v2_finsub_1 X1)) \quad (13)$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.((\neg v1_xboole_0 X1)\wedge \\ & ((v1_prob_1 X1 X0)\wedge(v4_prob_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0))))))\Rightarrow(\forall X2.((v1_funct_1 X2)\wedge(m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k7_numbers))))\Rightarrow(\forall X3.(\\ & m2_subset_1 X3 (k1_zfmisc_1 X0) X1)\Rightarrow((r1_tarski X3 (k9_xtuple_0 \\ & X2))\Rightarrow((r1_mesfunc1 X0 X1 X2 X3)\Leftrightarrow(\forall X4.(v1_xreal_0 X4)\Rightarrow(\\ & k9_subset_1 X0 X3 (k18_mesfunc1 X0 X2 (k1_measure6 X4)) \in X1)))))) \end{aligned}$$