

t6_measure4
(TMbFA9uqC6fZJm4oQ3mdCLhjiQRf8Z6BhSE)

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Let $m1_measure4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_measure4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12_supinf_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_supinf_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1_tarski X0 X1) \wedge (r1_xboole_0 X0 X2)) \Rightarrow (r1_tarski X0 (k4_xboole_0 X1 X2)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_measure4 X1 X0) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (k1_zfmisc_1 X0)) \Rightarrow ((X2 \in k1_measure4 X0 X1) \Leftrightarrow (\forall X3.(m1_subset_1 \\ & X3 (k1_zfmisc_1 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (k1_zfmisc_1 \\ & X0)) \Rightarrow (((r1_tarski X3 X2) \wedge (r1_tarski X4 (k6_subset_1 X0 X2))) \Rightarrow \\ & (k3_supinf_2 (k12_supinf_2 X1 X3) (k12_supinf_2 X1 X4) = k12_supinf_2 \\ & X1 (k4_subset_1 X0 X3 X4)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski X0 X0 \quad (4)$$

Assume the following.

$$\forall X0.k9_setfam_1 X0 = k1_zfmisc_1 X0 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (m1_measure4\ X1\ X0) \Rightarrow (\forall X2. (m1_subset_1 \\ & \quad X2\ (k1_zfmisc_1\ X0)) \Rightarrow (\forall X3. (m1_subset_1\ X3\ (k1_zfmisc_1 \\ & \quad X0)) \Rightarrow (((X2 \in k1_measure4\ X0\ X1) \wedge (r1_xboole_0\ X3\ X2)) \Rightarrow (k12_supinf_2 \\ & \quad X1\ (k4_subset_1\ X0\ X2\ X3) = k3_supinf_2\ (k12_supinf_2\ X1\ X2)\ (k12_supinf_2 \\ & \quad \quad X1\ X3)))))) \end{aligned}$$