

t22_measure6 (TMUisKC-
QyTN1Hvg6Ksv2dFNggJDuoZPS4Fn)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v6_xxreal_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k8_supinf_2 : \iota \Rightarrow \iota$ be given. Let $k7_supinf_2 : \iota \Rightarrow \iota$ be given. Let $k4_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $v2_xxreal_2 : \iota \Rightarrow o$ be given. Let $k1_xxreal_2 : \iota \Rightarrow \iota$ be given. Let $k2_xxreal_2 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xxreal_2 : \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v2_membered X1) \Rightarrow ((\\ & (v2_xxreal_2 X0) \wedge ((v6_xxreal_2 X0) \wedge ((v6_xxreal_2 X1) \wedge (k1_xxreal_2 \\ & X0 = k2_xxreal_2 X1)))) \Rightarrow (v6_xxreal_2 (k2_xboole_0 X0 X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v2_membered X1) \Rightarrow ((\\ & (v6_xxreal_2 X0) \wedge ((v1_xxreal_2 X1) \wedge ((v6_xxreal_2 X1) \wedge (k1_xxreal_2 \\ & X0 = k2_xxreal_2 X1)))) \Rightarrow (v6_xxreal_2 (k2_xboole_0 X0 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(v2_membered X0) \Rightarrow (k8_supinf_2 X0 = k1_xxreal_2 X0) \quad (3)$$

Assume the following.

$$\forall X0.(v2_membered X0) \Rightarrow (k7_supinf_2 X0 = k2_xxreal_2 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((m1_subset_1 X1 (k1_zfmisc_1 \\ & X0)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 X0))) \Rightarrow (k4_subset_1 X0 X1 X2 = \\ & k2_xboole_0 X1 X2) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_subset_1 X1 (k1_zfmisc_1 X0))\wedge(m1_subset_1 X2 (k1_zfmisc_1 X0)))\Rightarrow(m1_subset_1 (k4_subset_1 X0 X1 X2) (k1_zfmisc_1 X0)) \quad (6)$$

Assume the following.

$$\forall X0.(v2_membered X0)\Rightarrow((v2_xxreal_2 X0)\Leftrightarrow(k1_xxreal_2 X0 \in X0)) \quad (7)$$

Assume the following.

$$\forall X0.(v2_membered X0)\Rightarrow((v1_xxreal_2 X0)\Leftrightarrow(k2_xxreal_2 X0 \in X0)) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers))\Rightarrow(v3_membered X0) \quad (9)$$

Assume the following.

$$\forall X0.(v3_membered X0)\Rightarrow(v2_membered X0) \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0)\wedge((v6_xxreal_2 X0)\wedge(m1_subset_1 \\ & X0 (k1_zfmisc_1 k1_numbers))))\Rightarrow(\forall X1.((\neg v1_xboole_0 X1)\wedge \\ & ((v6_xxreal_2 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 k1_numbers))))\Rightarrow \\ & ((k8_supinf_2 X0 = k7_supinf_2 X1)\Rightarrow((\neg k8_supinf_2 X0 \in X0)\wedge(\neg \\ & k7_supinf_2 X1 \in X1))\vee((v6_xxreal_2 (k4_subset_1 k1_numbers X0 \\ & X1))\wedge(m1_subset_1 (k4_subset_1 k1_numbers X0 X1) (k1_zfmisc_1 \\ & k1_numbers)))))) \end{aligned}$$