

t19_measure6

(TMLdEwm8PnfFPyfHtY8wxRQqma6qrbUQcQy)

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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 $v4_measure5 : \iota \Rightarrow o$ be given. Let $k3_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_supinf_2 : \iota \Rightarrow \iota$ be given. Let $k8_supinf_2 : \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xxreal_2 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k7_numbers : \iota$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k4_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\neg r1_xxreal_0 X1 X0) \Rightarrow (k2_xxreal_2 (k3_xxreal_1 X0 X1) = X0))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \Rightarrow (k3_xxreal_1 X1 X0 = k1_xboole_0))) \quad (2)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_xboole_0 X0) \wedge ((v6_xxreal_2 X0) \wedge (m1_subset_1 \\ X0 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (\forall X1.(m1_subset_1 X1 k7_numbers) \Rightarrow \\ ((\exists X2.(m1_subset_1 X2 k7_numbers) \wedge ((r1_xxreal_0 X2 X1) \wedge \\ (X0 = k3_xxreal_1 X2 X1))) \Rightarrow (X1 = k8_supinf_2 X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(v2_membered X0) \Rightarrow (k7_supinf_2 X0 = k2_xxreal_2 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (k4_rcomp_1 X0 X1 = k3_xxreal_1 X0 X1) \quad (6)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(m1_subset_1\ (k7_supinf_2\ X0)\ k7_numbers) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers))\Rightarrow((v4_measure5 \\ X0)\Leftrightarrow(\exists X1.(m1_subset_1\ X1\ k7_numbers)\wedge(\exists X2.(v1_xreal_0 \\ X2)\wedge(X0 = k4_rcomp_1\ X1\ X2)))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0)\Leftrightarrow(X0 \in k7_numbers) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0\ X0)\wedge(v1_xreal_0\ X1))\Rightarrow(\\ (r1_xreal_0\ X0\ X1)\vee(r1_xreal_0\ X1\ X0)) \quad (10)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers))\Rightarrow(v3_membered \\ X0) \quad (11)$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0)\Rightarrow(v1_xreal_0\ X0) \quad (12)$$

Assume the following.

$$\forall X0.(v3_membered\ X0)\Rightarrow(v2_membered\ X0) \quad (13)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k7_numbers)\Rightarrow(v1_xreal_0\ X0) \quad (14)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v1_xboole_0\ X0)\wedge((v6_xreal_2\ X0)\wedge(m1_subset_1 \\ X0\ (k1_zfmisc_1\ k1_numbers))))\Rightarrow((v4_measure5\ X0)\Rightarrow(X0 = k3_xreal_1 \\ (k7_supinf_2\ X0)\ (k8_supinf_2\ X0))) \end{aligned}$$