

t11_measure5

(TMaMNRHsnuQHdbA5re7gCJLHrfKENvr6Pcp)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_numbers : \iota$ be given. Let $v6_xxreal_2 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_measure5 : \iota \Rightarrow \iota$ be given. Let $k1_supinf_2 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_3 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_xxreal_2 : \iota \Rightarrow \iota$ be given. Let $k1_xxreal_2 : \iota \Rightarrow \iota$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $k8_supinf_2 : \iota \Rightarrow \iota$ be given. Let $k7_supinf_2 : \iota \Rightarrow \iota$ be given. Let $k4_supinf_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (k1_xxreal_3 X0 (k2_xxreal_3 X0) = k6_numbers) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\neg r1_xxreal_0 X1 X0) \Rightarrow (k1_xxreal_1 X1 X0 = k1_xboole_0))) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1)) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (k1_xxreal_1 X0 X0 = k1_tarski X0) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (k2_xxreal_2 (k1_tarski X0) = X0) \quad (5)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (k1_xxreal_2 (k1_tarski X0) = X0) \quad (6)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(k8_supinf_2\ X0 = k1_xxreal_2\ X0) \quad (7)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(k7_supinf_2\ X0 = k2_xxreal_2\ X0) \quad (8)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k7_numbers)\wedge(m1_subset_1\ X1\ k7_numbers))\Rightarrow(k4_supinf_2\ X0\ X1 = k3_xxreal_3\ X0\ X1) \quad (10)$$

Assume the following.

$$k1_supinf_2 = k1_xboole_0 \quad (11)$$

Assume the following.

$$\begin{aligned} \forall X0.((v6_xxreal_2\ X0)\wedge(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers)))\Rightarrow \\ (\forall X1.((v6_xxreal_2\ X1)\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ k1_numbers)))\Rightarrow \\ ((r1_tarski\ X0\ X1)\Rightarrow(r1_xxreal_0\ (k2_measure5\ X0)\ (k2_measure5 \\ X1)))) \end{aligned} \quad (12)$$

Assume the following.

$$\forall X0.((v6_xxreal_2\ X0)\wedge(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers)))\Rightarrow \\ (r1_xxreal_0\ k6_numbers\ (k2_measure5\ X0)) \quad (13)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(m1_subset_1\ (k2_measure5\ X0)\ k7_numbers) \quad (14)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(((X0\neq k1_xboole_0)\Rightarrow(k2_measure5\ X0 = k4_supinf_2\ (k8_supinf_2\ X0)\ (k7_supinf_2\ X0)))\wedge((X0 = k1_xboole_0)\Rightarrow(k2_measure5\ X0 = k1_supinf_2))) \quad (15)$$

Assume the following.

$$\forall X0.(v1_xxreal_0\ X0)\Rightarrow(\forall X1.(v1_xxreal_0\ X1)\Rightarrow(k3_xxreal_3\ X0\ X1 = k1_xxreal_3\ X0\ (k2_xxreal_3\ X1))) \quad (16)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers))\Rightarrow(v3_membered\ X0) \quad (17)$$

Assume the following.

$$\forall X0.(v3_membered\ X0)\Rightarrow(v2_membered\ X0) \quad (18)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k7_numbers)\Rightarrow(v1_xreal_0\ X0) \quad (19)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1\ X0\ k7_numbers)\Rightarrow(\forall X1.(m1_subset_1 \\ & X1\ k7_numbers)\Rightarrow(\forall X2.((v6_xreal_2\ X2)\wedge(m1_subset_1\ X2 \\ & (k1_zfmisc_1\ k1_numbers))))\Rightarrow(\forall X3.((v6_xreal_2\ X3)\wedge \\ & m1_subset_1\ X3\ (k1_zfmisc_1\ k1_numbers)))\Rightarrow(((r1_tarski\ X2\ X3)\wedge \\ & ((X3 = k1_xreal_1\ X0\ X1)\wedge(r1_xreal_0\ X1\ X0)))\Rightarrow((k2_measure5 \\ & X2 = k1_supinf_2)\wedge(k2_measure5\ X3 = k1_supinf_2)))))) \end{aligned}$$