

t1_measure5 (TMKe-
JGBMQ7aHqJN12oPUMkeCy2GFWQ1XRFb)

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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 $v1_measure5 : \iota \Rightarrow o$ be given. Let $v2_measure5 : \iota \Rightarrow o$ be given. Let $v3_measure5 : \iota \Rightarrow o$ be given. Let $v4_measure5 : \iota \Rightarrow o$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $v1_xxreal_2 : \iota \Rightarrow o$ be given. Let $v2_xxreal_2 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_2 : \iota \Rightarrow \iota$ be given. Let $k1_xxreal_2 : \iota \Rightarrow \iota$ be given. Let $k3_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_supinf_2 : \iota \Rightarrow \iota$ be given. Let $k7_supinf_2 : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k4_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_numbers : \iota$ be given. Let $k1_measure5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v2_membered X0) \wedge ((\neg v1_xxreal_2 X0) \wedge ((\neg v2_xxreal_2 \\ & \quad X0) \wedge (v6_xxreal_2 X0)))) \Rightarrow (\exists X1.(v1_xxreal_0 X1) \wedge (\exists X2. \\ & (v1_xxreal_0 X2) \wedge ((r1_xxreal_0 X1 X2) \wedge (X0 = k4_xxreal_1 X1 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_membered X0) \wedge ((v1_xxreal_2 X0) \wedge ((\neg v2_xxreal_2 \\ & \quad X0) \wedge (v6_xxreal_2 X0)))) \Rightarrow (X0 = k2_xxreal_1 (k2_xxreal_2 X0) (k1_xxreal_2 \\ & \quad X0)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_membered X0) \wedge ((\neg v1_xxreal_2 X0) \wedge ((v2_xxreal_2 \\ & \quad X0) \wedge (v6_xxreal_2 X0)))) \Rightarrow (X0 = k3_xxreal_1 (k2_xxreal_2 X0) (k1_xxreal_2 \\ & \quad X0)) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.((v2_membered\ X0)\wedge((v1_xreal_2\ X0)\wedge((v2_xreal_2\ X0)\wedge(v6_xreal_2\ X0))))\Rightarrow(X0 = k1_xreal_1\ (k2_xreal_2\ X0)\ (k1_xreal_2\ X0)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1)\Rightarrow(m1_subset_1\ X0\ X1) \quad (5)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(k8_supinf_2\ X0 = k1_xreal_2\ X0) \quad (6)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(k7_supinf_2\ X0 = k2_xreal_2\ X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0\ X0)\wedge(v1_xreal_0\ X1))\Rightarrow(k4_rcomp_1\ X0\ X1 = k3_xreal_1\ X0\ X1) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0\ X0)\wedge(v1_xreal_0\ X1))\Rightarrow(k3_rcomp_1\ X0\ X1 = k2_xreal_1\ X0\ X1) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0\ X0)\wedge(v1_xreal_0\ X1))\Rightarrow(k1_rcomp_1\ X0\ X1 = k1_xreal_1\ X0\ X1) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k7_numbers)\wedge(m1_subset_1\ X1\ k7_numbers))\Rightarrow(k1_measure5\ X0\ X1 = k4_xreal_1\ X0\ X1) \quad (11)$$

Assume the following.

$$\forall X0.((v3_membered\ X0)\wedge(v2_xreal_2\ X0))\Rightarrow((v1_xreal_0\ (k1_xreal_2\ X0))\wedge(v1_xreal_0\ (k1_xreal_2\ X0))) \quad (12)$$

Assume the following.

$$\forall X0.((v3_membered\ X0)\wedge(v1_xreal_2\ X0))\Rightarrow((v1_xreal_0\ (k2_xreal_2\ X0))\wedge(v1_xreal_0\ (k2_xreal_2\ X0))) \quad (13)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(m1_subset_1\ (k8_supinf_2\ X0)\ k7_numbers) \quad (14)$$

Assume the following.

$$\forall X0.(v2_membered\ X0) \Rightarrow (m1_subset_1\ (k7_supinf_2\ X0)\ k7_numbers) \quad (15)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers)) \Rightarrow ((v4_measure5 \\ X0) \Leftrightarrow (\exists X1.(m1_subset_1\ X1\ k7_numbers) \wedge (\exists X2.(v1_xreal_0 \\ X2) \wedge (X0 = k4_rcomp_1\ X1\ X2)))) \end{aligned} \quad (16)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers)) \Rightarrow ((v3_measure5 \\ X0) \Leftrightarrow (\exists X1.(v1_xreal_0\ X1) \wedge (\exists X2.(m1_subset_1\ X2 \\ k7_numbers) \wedge (X0 = k3_rcomp_1\ X1\ X2)))) \end{aligned} \quad (17)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers)) \Rightarrow ((v2_measure5 \\ X0) \Leftrightarrow (\exists X1.(v1_xreal_0\ X1) \wedge (\exists X2.(v1_xreal_0\ X2) \wedge \\ (X0 = k1_rcomp_1\ X1\ X2)))) \end{aligned} \quad (18)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers)) \Rightarrow ((v1_measure5 \\ X0) \Leftrightarrow (\exists X1.(m1_subset_1\ X1\ k7_numbers) \wedge (\exists X2.(m1_subset_1 \\ X2\ k7_numbers) \wedge (X0 = k1_measure5\ X1\ X2)))) \end{aligned} \quad (19)$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0) \Leftrightarrow (X0 \in k7_numbers) \quad (20)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers)) \Rightarrow (v3_membered\ X0) \quad (21)$$

Assume the following.

$$\forall X0.(v3_membered\ X0) \Rightarrow (v2_membered\ X0) \quad (22)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k7_numbers) \Rightarrow (v1_xreal_0\ X0) \quad (23)$$

Theorem 1

$$\begin{aligned} \forall X0.((v6_xreal_2\ X0) \wedge (m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers))) \Rightarrow \\ ((\neg(\neg v1_measure5\ X0) \wedge (\neg v2_measure5\ X0) \wedge (\neg v3_measure5\ X0) \wedge \\ (\neg v4_measure5\ X0))) \end{aligned}$$