

t3_mesfunc5

(TMSsXzz1d364sk6bo4v2pm7zidaUi1bNvs1)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_extreal1 : \iota \Rightarrow \iota$ be given. Let $k4_supinf_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_supinf_1 : \iota$ be given. Let $k2_supinf_1 : \iota$ be given. Let $k2_supinf_2 : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k1_xreal_0 : \iota$ be given. Let $k2_xreal_0 : \iota$ be given. Let $k3_xreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1_subset_1 X0 k7_numbers) \Rightarrow ((r1_xreal_0 (k2_supinf_2 (k3_extreal1 X0)) X0) \wedge (r1_xreal_0 X0 (k3_extreal1 X0))) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow (\neg(\neg(X0 = k1_xreal_0) \wedge (X1 = k1_xreal_0)) \wedge \\ & ((\neg(X0 = k2_xreal_0) \wedge (X1 = k2_xreal_0)) \wedge ((\neg r1_xreal_0 X2 (k3_xreal_3 X0 X1)) \wedge (\neg(X0 \neq k1_xreal_0) \wedge ((X1 \neq k2_xreal_0) \wedge \\ & ((X2 \neq k2_xreal_0) \wedge (\neg r1_xreal_0 (k1_xreal_3 X2 X1) X0)))))))))) \quad (2) \end{aligned}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. (v1_xreal_0 X2) \Rightarrow (((r1_xreal_0 X0 X1) \wedge (r1_xreal_0 X1 X2)) \Rightarrow (r1_xreal_0 X0 X2)))) \quad (3)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k7_numbers) \Rightarrow (\forall X1.(m1_subset_1 X1 k7_numbers) \Rightarrow (r1_xreal_0 (k4_supinf_2 X1 X0) (k3_extreal1 (k4_supinf_2 X0 X1)))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k7_numbers) \wedge (m1_subset_1 X1 k7_numbers)) \Rightarrow (k4_supinf_2 X0 X1 = k3_xreal_3 X0 X1) \quad (5)$$

Assume the following.

$$k2_supinf_1 = k2_xxreal_0 \quad (6)$$

Assume the following.

$$k1_supinf_1 = k1_xxreal_0 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k7_numbers)\wedge(m1_subset_1 X1 k7_numbers))\Rightarrow(m1_subset_1 (k4_supinf_2 X0 X1) k7_numbers) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k7_numbers)\Rightarrow(m1_subset_1 (k3_extreal1 X0) k7_numbers) \quad (9)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(v1_xxreal_0 X0) \quad (10)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k7_numbers)\Rightarrow(v1_xxreal_0 X0) \quad (11)$$

Theorem 1

$$\begin{aligned} &\forall X0.(m1_subset_1 X0 k7_numbers)\Rightarrow(\forall X1.(m1_subset_1 \\ &X1 k7_numbers)\Rightarrow(\forall X2.(v1_xreal_0 X2)\Rightarrow(\neg(\neg v1_xxreal_0 \\ &X2 (k3_extreal1 (k4_supinf_2 X0 X1))))\wedge((\neg(X0 = k1_supinf_1)\wedge \\ &X1 = k1_supinf_1))\wedge((\neg(X0 = k2_supinf_1)\wedge(X1 = k2_supinf_1))\wedge \\ &(\neg(X0\neq k1_supinf_1)\wedge((X0\neq k2_supinf_1)\wedge((X1\neq k1_supinf_1)\wedge \\ &(X1\neq k2_supinf_1)))))))))) \end{aligned}$$