

t7_xxreal_3

(TMSrVVNB4Fx7avPKztowTYwiW38f5xarxgh)

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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 $k1_xxreal_0 : \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$k2_xxreal_3 \ k1_xxreal_0 = k2_xxreal_0 \tag{1}$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0) \Rightarrow (X0 = k1_xboole_0) \tag{2}$$

Assume the following.

$$k2_xxreal_3 \ k2_xxreal_0 = k1_xxreal_0 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 \ X0 \ X1) \tag{4}$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0) \Rightarrow (\neg(\neg X0 \in k1_numbers) \wedge ((X0 \neq k1_xxreal_0) \wedge (X0 \neq k2_xxreal_0))) \tag{5}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 \ X0) \wedge (v1_xcmplx_0 \ X1)) \Rightarrow ((X0 = X1) \Rightarrow (k2_xxreal_3 \ X0 = k4_xcmplx_0 \ X1)) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1_xreal_0 X0)\wedge((v1_xreal_0 X1)\wedge((v1_xcmplx_0 X2)\wedge(v1_xcmplx_0 X3))))\Rightarrow(((X0 = X2)\wedge(X1 = X3))\Rightarrow(k1_xxreal_3 X0 X1 = k2_xcmplx_0 X2 X3)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(((v1_xxreal_0 X0)\wedge((v3_xxreal_0 X0)\wedge(\neg v1_xreal_0 X0)))\wedge((v1_xxreal_0 X1)\wedge((v2_xxreal_0 X1)\wedge(\neg v1_xreal_0 X1))))\Rightarrow((v1_xboole_0 (k1_xxreal_3 X0 X1))\wedge(v1_xxreal_0 (k1_xxreal_3 X0 X1))) \quad (9)$$

Assume the following.

$$v3_xxreal_0 k2_xxreal_0 \quad (10)$$

Assume the following.

$$v2_xxreal_0 k1_xxreal_0 \quad (11)$$

Assume the following.

$$v1_xxreal_0 k2_xxreal_0 \quad (12)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow((v1_xxreal_0 (k2_xxreal_3 X0))\wedge(v1_xreal_0 (k2_xxreal_3 X0))) \quad (13)$$

Assume the following.

$$v1_xxreal_0 k1_xxreal_0 \quad (14)$$

Assume the following.

$$\neg v1_xreal_0 k2_xxreal_0 \quad (15)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0)\Rightarrow(\forall X1.(v1_xcmplx_0 X1)\Rightarrow((X1 = k4_xcmplx_0 X0)\Leftrightarrow(k2_xcmplx_0 X0 X1 = k6_numbers))) \quad (16)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0)\Rightarrow(\forall X1.(v1_xxreal_0 X1)\Rightarrow(((v1_xreal_0 X0)\Rightarrow((X1 = k2_xxreal_3 X0)\Leftrightarrow(\exists X2.(v1_xcmplx_0 X2)\wedge((X0 = X2)\wedge(X1 = k4_xcmplx_0 X2))))))\wedge(((X0 = k1_xxreal_0)\Rightarrow((X1 = k2_xxreal_3 X0)\Leftrightarrow(X1 = k2_xxreal_0)))\wedge(\neg(\neg v1_xreal_0 X0)\wedge((X0\neq k1_xxreal_0)\wedge(\neg(X1 = k2_xxreal_3 X0)\Leftrightarrow(X1 = k1_xxreal_0)))))) \quad (17)$$

Assume the following.

$$k1_xxreal_0 = k1_numbers \quad (18)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0)\wedge(v1_xxreal_0 X1))\Rightarrow(k1_xxreal_3 X0 X1 = k1_xxreal_3 X1 X0) \quad (19)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(v1_xcmplx_0 X0) \quad (20)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (21)$$

Theorem 1

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