

t28_topreal6
(TMQpbjd6tiKELmtaUX2mpHPvh53Aq7fun3i)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k3_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $np_0 : \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ (k15_euclid X0))) \Rightarrow ((k1_rlvect_1 (k15_euclid X0) X1 np_1 = X1) \wedge \\ (k1_rlvect_1 (k15_euclid X0) X1 k6_numbers = k4_struct_0 (k15_euclid \\ X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ (k15_euclid X0))) \Rightarrow ((k3_rlvect_1 (k15_euclid X0) (k4_struct_0 \\ (k15_euclid X0)) X1 = X1) \wedge (k3_rlvect_1 (k15_euclid X0) X1 (k4_struct_0 \\ (k15_euclid X0)) = X1))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1)) \quad (4)$$

Assume the following.

$$\begin{aligned} ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\ ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$v1_xboole_0 \ np_0 \quad (7)$$

Assume the following.

$$k6_xcmplx_0 \ np_1 \ np_1 = np_0 \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1_subset_1 \ X0 \ k1_numbers) \wedge (v1_xreal_0 \\ & \ X1)) \Rightarrow (k9_real_1 \ X0 \ X1 = k6_xcmplx_0 \ X0 \ X1) \end{aligned} \quad (9)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (10)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (11)$$

Assume the following.

$$\forall X0. (m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \quad (12)$$

Assume the following.

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

Assume the following.

$$\forall X0. (m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (v1_xreal_0 \ X0) \quad (14)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (\forall X1. (m1_subset_1 \\ & \ X1 \ (u1_struct_0 \ (k15_euclid \ np_2))) \Rightarrow (\forall X2. (m1_subset_1 \\ & \ X2 \ (u1_struct_0 \ (k15_euclid \ np_2))) \Rightarrow (\forall X3. (m1_subset_1 \\ & \ X3 \ (u1_struct_0 \ (k15_euclid \ np_2))) \Rightarrow (\neg (X1 = k3_rlvect_1 \ (k15_euclid \\ & \ np_2) \ (k1_rlvect_1 \ (k15_euclid \ np_2) \ X2 \ (k9_real_1 \ np_1 \ X0)) \\ & \ (k1_rlvect_1 \ (k15_euclid \ np_2) \ X3 \ X0)) \wedge ((X1 \neq X3) \wedge ((r1_xxreal_0 \\ & \ X0 \ np_1) \wedge (r1_xxreal_0 \ np_1 \ X0)))))) \end{aligned}$$