

t26_toprealb (TMR- wFMU7GigYdtzJmqN89KEQGwbgi4EaP9U)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k8_toprealb : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $k11_toprealb : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ 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 $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $l1_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v5_rltopsp1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (2)$$

Assume the following.

$$\forall X0. (l1_pre_topc X0) \Rightarrow (\forall X1. (m1_pre_topc X1 X0) \Rightarrow (m1_subset_1 (u1_struct_0 X1) (k1_zfmisc_1 (u1_struct_0 X0)))) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & ((m1_subset_1 X0 (u1_struct_0 (k8_toprealb np_2))) \Rightarrow ((r1_xxreal_0 \\ & (k1_real_1 np_1) (k17_euclid X0)) \wedge ((r1_xxreal_0 (k17_euclid \\ & X0) np_1) \wedge ((r1_xxreal_0 (k1_real_1 np_1) (k18_euclid X0)) \wedge \\ & (r1_xxreal_0 (k18_euclid X0) np_1)))))) \quad (4) \end{aligned}$$

Assume the following.

$$\begin{aligned} & ((v2_xreal_0 \ np_2) \wedge (m2_subset_1 \ np_2 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_2 \ k5_numbers) \wedge (m1_subset_1 \ np_2 \ k1_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (6)$$

Assume the following.

$$v6_membered \ k4_ordinal1 \quad (7)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 \ X0) \wedge (l1_struct_0 \ X0)) \Rightarrow (\neg v1_xboole_0 \ (u1_struct_0 \ X0)) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 \ X0 \ (u1_struct_0 \ (k8_toprealb \ np_2))) \Rightarrow \\ & ((\neg v2_struct_0 \ (k11_toprealb \ X0)) \wedge (v1_pre_topc \ (k11_toprealb \ X0))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0. (l1_pre_topc \ X0) \Rightarrow (\forall X1. (m1_pre_topc \ X1 \ X0) \Rightarrow (l1_pre_topc \ X1)) \quad (10)$$

Assume the following.

$$\forall X0. (l1_rltopsp1 \ X0) \Rightarrow ((l1_rlvect_1 \ X0) \wedge (l1_pre_topc \ X0)) \quad (11)$$

Assume the following.

$$\forall X0. (l1_pre_topc \ X0) \Rightarrow (l1_struct_0 \ X0) \quad (12)$$

Assume the following.

$$\forall X0. (v7_ordinal1 \ X0) \Rightarrow (m1_pre_topc \ (k8_toprealb \ X0) \ (k15_euclid \ X0)) \quad (13)$$

Assume the following.

$$\forall X0. (v7_ordinal1 \ X0) \Rightarrow ((v5_rltopsp1 \ (k15_euclid \ X0)) \wedge (l1_rltopsp1 \ (k15_euclid \ X0))) \quad (14)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 \ X0 \ (u1_struct_0 \ (k8_toprealb \ np_2))) \Rightarrow \\ & ((v1_pre_topc \ (k11_toprealb \ X0)) \wedge (m1_pre_topc \ (k11_toprealb \ X0) \ (k8_toprealb \ np_2))) \end{aligned} \quad (15)$$

Assume the following.

$$\forall X0. (v6_membered \ X0) \Rightarrow (\forall X1. (m1_subset_1 \ X1 \ X0) \Rightarrow (v7_ordinal1 \ X1)) \quad (16)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k8_toprealb np_2)))\Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2)))\Rightarrow \\ & ((m1_subset_1 X1 (u1_struct_0 (k11_toprealb X0)))\Rightarrow((r1_xxreal_0 \\ & (k1_real_1 np_1) (k17_euclid X1))\wedge((r1_xxreal_0 (k17_euclid \\ & X1) np_1)\wedge((r1_xxreal_0 (k1_real_1 np_1) (k18_euclid X1))\wedge \\ & (r1_xxreal_0 (k18_euclid X1) np_1)))))) \end{aligned}$$