

t3_brouwer
(TMG4Vs9DjUUwYJ622btm874rkEYUAGRZtsv)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $k2_brouwer : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_topreal9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $k1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_rltopsp1 : \iota \Rightarrow o$ be given. Let $k2_struct_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$k5_numbers = k4_ordinal1 \tag{1}$$

Assume the following.

$$v6_membered\ k4_ordinal1 \tag{2}$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_pre_topc\ X1\ X0) \Rightarrow (l1_pre_topc\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.(l1_rltopsp1\ X0) \Rightarrow ((l1_rlvect_1\ X0) \wedge (l1_pre_topc\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0) \Rightarrow (l1_struct_0\ X0) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1\ X0) \wedge ((m1_subset_1\ X1\ (u1_struct_0\ (k15_euclid\ X0))) \wedge (v1_xreal_0\ X2))) \Rightarrow (m1_subset_1\ (k2_topreal9\ X0\ X1\ X2)\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid\ X0)))) \tag{6}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((m1_subset_1 X0 k5_numbers) \wedge \\ & ((m1_subset_1 X1 (u1_struct_0 (k15_euclid X0))) \wedge (v1_xreal_0 \\ & X2))) \Rightarrow (m1_pre_topc (k2_brouwer X0 X1 X2) (k15_euclid X0)) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((l1_pre_topc X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (u1_struct_0 X0)))) \Rightarrow ((v1_pre_topc (k1_pre_topc X0 X1)) \wedge (m1_pre_topc \\ & (k1_pre_topc X0 X1) X0)) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v7_ordinal1 X0) \Rightarrow ((v5_rltopsp1 (k15_euclid X0)) \wedge \\ & (l1_rltopsp1 (k15_euclid X0))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_pre_topc X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \Rightarrow (\forall X2. ((v1_pre_topc X2) \wedge (m1_pre_topc \\ & X2 X0)) \Rightarrow ((X2 = k1_pre_topc X0 X1) \Leftrightarrow (k2_struct_0 X2 = X1)))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0. (l1_struct_0 X0) \Rightarrow (k2_struct_0 X0 = u1_struct_0 X0) \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1. (m1_subset_1 \\ & X1 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\forall X2. (v1_xreal_0 X2) \Rightarrow \\ & (k2_brouwer X0 X1 X2 = k1_pre_topc (k15_euclid X0) (k2_topreal9 \\ & X0 X1 X2)))) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v6_membered X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow \\ & (v7_ordinal1 X1)) \end{aligned} \quad (13)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1. (v1_xreal_0 \\ & X1) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 (k15_euclid X0))) \Rightarrow \\ & (u1_struct_0 (k2_brouwer X0 X2 X1) = k2_topreal9 X0 X2 X1))) \end{aligned}$$