

t1_brouwer
(TMUb3uRr52baedofxPfSutpABdPaZYzyhGJ)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $k1_brouwer : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k4_borsuk_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge ((v2_pre_topc X1) \wedge (l1_pre_topc \\ & X1))) \Rightarrow (k1_brouwer X0 X1 = ReplSep2 (toset (\lambda X2 : \iota. m1_subset_1 \\ & X2 (u1_struct_0 X0))) (\lambda X2 : \iota. toset (\lambda X3 : \iota. m1_subset_1 \\ & X3 (u1_struct_0 X1))) (\lambda X2 : \iota. \lambda X3 : \iota. X2 \neq X3) (\lambda X2 : \\ & \iota. \lambda X3 : \iota. k4_borsuk_1 X0 X1 X2 X3))) \end{aligned} \quad (1)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge ((v2_pre_topc X1) \wedge (l1_pre_topc \\ & X1))) \Rightarrow (\forall X2.(X2 \in k1_brouwer X0 X1) \Leftrightarrow (\exists X3.(m1_subset_1 \\ & X3 (u1_struct_0 X0)) \wedge (\exists X4.(m1_subset_1 X4 (u1_struct_0 \\ & X1)) \wedge ((X2 = k4_borsuk_1 X0 X1 X3 X4) \wedge (X3 \neq X4)))))) \end{aligned}$$