

t25_frechet2 (TMGEFFqQbFkPFLZTpZm- cYZHgtnXXzhmooiq)

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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 $v8_pre_topc : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_frechet : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_frechet : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_frechet2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_frechet : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow ((v8_pre_topc X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 \\ & X1 k5_numbers (u1_struct_0 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers (u1_struct_0 X0)))))) \Rightarrow (\neg (v2_frechet \\ & X1 X0) \wedge (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (k2_frechet \\ & X0 X1 \neq k6_domain_1 (u1_struct_0 X0) X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge ((\\ & v1_funct_2 X1 k5_numbers (u1_struct_0 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers (u1_struct_0 X0)))))) \Rightarrow ((v2_frechet \\ & X1 X0) \Leftrightarrow (\exists X2.(m1_subset_1 X2 (u1_struct_0 X0)) \wedge (r1_frechet \\ & X0 X1 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\ & (u1_struct_0 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (u1_struct_0 X0)))))) \Rightarrow ((\exists X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \wedge (k2_frechet X0 X1 = k6_domain_1 (u1_struct_0 \\ & X0) X2)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((X2 = \\ & k2_frechet2 X0 X1) \Leftrightarrow (r1_frechet X0 X1 X2)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow ((v8_pre_topc X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 \\ & X1 \ k5_numbers (u1_struct_0 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 \ k5_numbers (u1_struct_0 X0)))))) \Rightarrow (\forall X2.(\\ & m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r1_frechet X0 X1 X2) \Leftrightarrow ((v2_frechet \\ & X1 X0) \wedge (X2 = k2_frechet2 X0 X1)))))) \end{aligned}$$