

t13_fcont_2 (TMaWsGSpwyUCp-
ToGn8oV8Fqg4n CZQXzh38P)

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Let $v1_funct_1 : \iota \Rightarrow o$ 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 $k1_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_rcomp_1 : \iota \Rightarrow o$ be given. Let $v1_fcont_2 : \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_seq_4 : \iota \Rightarrow \iota$ be given. Let $k7_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_seq_4 : \iota \Rightarrow \iota$ be given. Let $v1_fcont_1 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow (((r1_tarski X0 (k1_relset_1 \\ & k1_numbers X1)) \wedge (v1_fcont_2 (k2_partfun1 k1_numbers k1_numbers \\ & X1 X0))) \Rightarrow (v1_fcont_1 (k2_partfun1 k1_numbers k1_numbers X1 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k1_numbers k1_numbers)))) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\ & k1_numbers)) \Rightarrow (\neg (X1 \neq k1_xboole_0) \wedge ((r1_tarski X1 (k1_relset_1 \\ & k1_numbers X0)) \wedge ((v1_rcomp_1 X1) \wedge ((v1_fcont_1 (k2_partfun1 \\ & k1_numbers k1_numbers X0 X1)) \wedge (\forall X2. (v1_xreal_0 X2) \Rightarrow (\forall X3. \\ & (v1_xreal_0 X3) \Rightarrow (\neg (X2 \in X1) \wedge ((X3 \in X1) \wedge ((k1_seq_1 X0 X2 = k4_seq_4 \\ & (k7_relset_1 k1_numbers k1_numbers X0 X1)) \wedge (k1_seq_1 X0 X3 = k5_seq_4 \\ & (k7_relset_1 k1_numbers k1_numbers X0 X1)))))))))))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k1_numbers k1_numbers)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ & k1_numbers)) \Rightarrow (\neg(X1 \neq k1_xboole_0) \wedge ((r1_tarski X1 (k1_relset_1 \\ & k1_numbers X0)) \wedge ((v1_rcomp_1 X1) \wedge ((v1_fcont_2 (k2_partfun1 \\ & k1_numbers k1_numbers X0 X1)) \wedge (\forall X2.(m1_subset_1 X2 k1_numbers) \Rightarrow \\ & (\forall X3.(m1_subset_1 X3 k1_numbers) \Rightarrow (\neg(X2 \in X1) \wedge ((X3 \in X1) \wedge \\ & ((k1_seq_1 X0 X2 = k4_seq_4 (k7_relset_1 k1_numbers k1_numbers \\ & X0 X1)) \wedge (k1_seq_1 X0 X3 = k5_seq_4 (k7_relset_1 k1_numbers k1_numbers \\ & X0 X1)))))))))))))) \end{aligned}$$