

t39_fcont_1

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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 $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_seq_4 : \iota \Rightarrow \iota$ be given. Let $v1_fcont_1 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v1_zfmisc_1 : \iota \Rightarrow o$ be given. Let $v3_funct_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v5_relat_1 X1 X0)) \Rightarrow (k2_relset_1 X0 X1 = k10_xtuple_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Rightarrow (k1_seq_4 X0 = k1_tarski X0) \quad (2)$$

Assume the following.

$$\forall X0. v1_zfmisc_1 (k1_tarski X0) \quad (3)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (\neg v3_funct_1 X0))) \Rightarrow (\neg v1_zfmisc_1 (k10_xtuple_0 X0)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow ((v4_relat_1 X2 X0) \wedge (v5_relat_1 X2 X1)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (6)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers))) \Rightarrow (((v1_funct_1 X0) \wedge (v3_funct_1 X0)) \Rightarrow ((v1_funct_1 X0) \wedge (v1_fcont_1 X0))) \quad (7)$$

Theorem 1

$$\forall X0.((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow ((\exists X1.(v1_xreal_0 X1) \wedge (k2_relset_1 k1_numbers X0 = k1_seq_4 X1)) \Rightarrow (v1_fcont_1 X0))$$