

t37_limfunc1

(TMYDHdVkJEtiaAaPaj3unt5dJgdaesWXnj7yL)

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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 $k1_numbers : \iota$ 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 $v2_relat_1 : \iota \Rightarrow o$ be given. Let $v2_comseq_2 : \iota \Rightarrow o$ be given. Let $k2_seq_2 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v7_valued_0 : \iota \Rightarrow o$ be given. Let $v2_limfunc1 : \iota \Rightarrow o$ be given. Let $k37_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow \\ & (((v2_comseq_2 X0) \wedge (k2_seq_2 X0 = k6_numbers)) \Rightarrow ((\forall X1. \\ & (m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow (\exists X2. (m2_subset_1 \\ & X2 k1_numbers k5_numbers) \wedge ((r1_xxreal_0 X1 X2) \wedge (r1_xxreal_0 \\ & k6_numbers (k1_seq_1 X0 X2)))))) \vee (v2_limfunc1 (k37_valued_1 k5_numbers \\ & k1_numbers X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow \\ & (((v2_relat_1 X0) \wedge ((v2_comseq_2 X0) \wedge ((k2_seq_2 X0 = k6_numbers) \wedge \\ & (v7_valued_0 X0)))))) \Rightarrow (\forall X1. (m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow \\ & (\neg r1_xxreal_0 k6_numbers (k1_seq_1 X0 X1)))) \end{aligned} \tag{2}$$

Assume the following.

$$m2_subset_1 k6_numbers k1_numbers k5_numbers \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k1_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k1_numbers)))))) \Rightarrow \\ & (((v2_relat_1 X0) \wedge ((v2_comseq_2 X0) \wedge ((k2_seq_2 X0 = k6_numbers) \wedge \\ & (v7_valued_0 X0)))))) \Rightarrow (v2_limfunc1 (k37_valued_1 k5_numbers k1_numbers \\ & X0)) \end{aligned}$$