

t9_integra7 (TMJs-
myU5h3kf6ZM4RAsDmDVHPZYFG7aEQwj)

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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 $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $r2_fdiff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_rfunct_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_rcomp_1 : \iota \Rightarrow o$ be given. Let $r2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_fdiff_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k32_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_rfunct_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k20_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow ((r2_fdiff_1 X1 X0) \Rightarrow \\ & (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v3_rcomp_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers))) \Rightarrow \\ & (\forall X1. ((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k1_numbers k1_numbers)))) \Rightarrow (((r2_fdiff_1 X1 X0) \wedge (\forall X2. \\ & (m1_subset_1 X2 k1_numbers) \Rightarrow (\neg(X2 \in X0) \wedge (k1_seq_1 X1 X2 = k6_numbers)))) \Rightarrow \\ & ((r2_fdiff_1 (k6_rfunct_1 k1_numbers k1_numbers X1) X0) \wedge (r2_relset_1 \\ & k1_numbers k1_numbers (k2_fdiff_1 (k6_rfunct_1 k1_numbers k1_numbers \\ & X1) X0) (k32_valued_1 k1_numbers k1_numbers (k3_rfunct_1 k1_numbers \\ & k1_numbers (k2_fdiff_1 X1 X0) (k20_valued_1 k1_numbers k1_numbers \\ & k1_numbers X1 X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (\forall X1. \\ & ((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers \\ & k1_numbers)))) \Rightarrow ((r2_fdiff_1 X1 X0) \Rightarrow (v3_rcomp_1 X0))) \end{aligned} \quad (3)$$

Theorem 1

$$\forall X0.\forall X1.((v1_funct_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers))))\Rightarrow(((\forall X2.\neg(X2 \in X0)\wedge(k1_seq_1 X1 X2 = k6_numbers)\wedge(r2_diff_1 X1 X0))\Rightarrow(r2_diff_1 (k6_rfunct_1 k1_numbers k1_numbers X1) X0))$$