

t2_integr16

(TMa9FPyx1TXJKx58ojvJuXNrf9upczKXckT)

October 27, 2020

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 $k2_numbers : \iota$ be given. Let $r2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_comseq_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k6_comseq_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge (\\ & m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k2_numbers)))) \Rightarrow (\\ & \forall X2. (r2_relset_1 X0 k1_numbers (k2_partfun1 X0 k1_numbers \\ & (k5_comseq_3 X0 X1) X2) (k5_comseq_3 X0 (k2_partfun1 X0 k2_numbers \\ & X1 X2))) \wedge (r2_relset_1 X0 k1_numbers (k2_partfun1 X0 k1_numbers \\ & (k6_comseq_3 X0 X1) X2) (k6_comseq_3 X0 (k2_partfun1 X0 k2_numbers \\ & X1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((m1_subset_1 X2 \\ & (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))) \Rightarrow ((r2_relset_1 X0 X1 X2 X3) \Rightarrow (r2_relset_1 \\ & X0 X1 X3 X2)) \end{aligned} \tag{2}$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 k2_numbers)))) \Rightarrow ((v1_funct_1 (k5_comseq_3 X0 \\ & X1)) \wedge (m1_subset_1 (k5_comseq_3 X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 k1_numbers)))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1_funct_1 X2)\wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))))\Rightarrow((v1_funct_1 \\ & (k2_partfun1 X0 X1 X2 X3))\wedge(m1_subset_1 (k2_partfun1 X0 X1 X2 X3) \\ & (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_funct_1 X0)\wedge(m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k1_numbers k2_numbers))))\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ & k1_numbers))\Rightarrow(r2_relset_1 k1_numbers k1_numbers (k5_comseq_3 \\ & k1_numbers (k2_partfun1 k1_numbers k2_numbers X0 X1)) (k2_partfun1 \\ & k1_numbers k1_numbers (k5_comseq_3 k1_numbers X0 X1)))) \end{aligned}$$