

t10_comseq_1
(TMPZ1WvdEdWTC5Zqzy9fXEPFdKJDt9py4dC)

October 27, 2020

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 $k2_numbers : \iota$ 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 $r2_reset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k19_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k2_numbers) \wedge \\
& (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers)))))) \Rightarrow \\
& (\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers k2_numbers) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers)))))) \Rightarrow \\
& (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 X2 k5_numbers k2_numbers) \wedge \\
& (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers)))))) \Rightarrow \\
& (r2_reset_1 k5_numbers k2_numbers (k19_valued_1 k5_numbers \\
& k2_numbers k2_numbers (k2_valued_1 k5_numbers k2_numbers k2_numbers \\
& X0 X1) X2) (k2_valued_1 k5_numbers k2_numbers k2_numbers (k19_valued_1 \\
& k5_numbers k2_numbers k2_numbers X0 X2) (k19_valued_1 k5_numbers \\
& k2_numbers k2_numbers X1 X2))))))
\end{aligned} \tag{1}$$

Assume the following.

$$v1_membered k2_numbers \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((v1_membered \\
& X1) \wedge ((v1_membered X2) \wedge (((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\
& (k2_zfmisc_1 X0 X1)))))) \wedge ((v1_funct_1 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\
& (k2_zfmisc_1 X0 X2)))))) \Rightarrow ((v1_funct_1 (k2_valued_1 X0 X1 X2 X3 \\
& X4)) \wedge (m1_subset_1 (k2_valued_1 X0 X1 X2 X3 X4) (k1_zfmisc_1 (k2_zfmisc_1 \\
& X0 k2_numbers))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.((v1_membered \\
& X1)\wedge((v1_membered X2)\wedge(((v1_funct_1 X3)\wedge(m1_subset_1 X3 (k1_zfmisc_1 \\
& (k2_zfmisc_1 X0 X1))))\wedge((v1_funct_1 X4)\wedge(m1_subset_1 X4 (k1_zfmisc_1 \\
& (k2_zfmisc_1 X0 X2))))))\Rightarrow(k19_valued_1 X0 X1 X2 X3 X4 = k19_valued_1 \\
& X0 X1 X2 X4 X3)
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((v1_funct_1 X0)\wedge((v1_funct_2 X0 k5_numbers k2_numbers)\wedge \\
& (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers))))\Rightarrow \\
& (\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 k5_numbers k2_numbers)\wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers))))\Rightarrow \\
& (\forall X2.((v1_funct_1 X2)\wedge((v1_funct_2 X2 k5_numbers k2_numbers)\wedge \\
& (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers))))\Rightarrow \\
& (r2_reset_1 k5_numbers k2_numbers (k19_valued_1 k5_numbers \\
& k2_numbers k2_numbers X0 (k2_valued_1 k5_numbers k2_numbers k2_numbers \\
& X1 X2)) (k2_valued_1 k5_numbers k2_numbers k2_numbers (k19_valued_1 \\
& k5_numbers k2_numbers k2_numbers X0 X1) (k19_valued_1 k5_numbers \\
& k2_numbers k2_numbers X0 X2))))))
\end{aligned}$$