

t80_finseqop
(TMJu66qknPDDVUpQpJeMdBgE1qrvfVvm8so)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k6_finseqop : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow \\
& (\forall X2.(\neg v1_xboole_0 X2) \Rightarrow (\forall X3.(\neg v1_xboole_0 X3) \Rightarrow \\
& (\forall X4.(\neg v1_xboole_0 X4) \Rightarrow (\forall X5.((v1_funct_1 X5) \wedge \\
& ((v1_funct_2 X5 (k2_zfmisc_1 X0 X1) X2) \wedge (m1_subset_1 X5 (k1_zfmisc_1 \\
& (k2_zfmisc_1 (k2_zfmisc_1 X0 X1) X2)))))) \Rightarrow (\forall X6.((v1_funct_1 \\
& X6) \wedge ((v1_funct_2 X6 X3 X0) \wedge (m1_subset_1 X6 (k1_zfmisc_1 (k2_zfmisc_1 \\
& X3 X0)))))) \Rightarrow (\forall X7.((v1_funct_1 X7) \wedge ((v1_funct_2 X7 X4 X1) \wedge \\
& (m1_subset_1 X7 (k1_zfmisc_1 (k2_zfmisc_1 X4 X1)))))) \Rightarrow ((v1_funct_1 \\
& (k6_finseqop X5 X6 X7) \wedge ((v1_funct_2 (k6_finseqop X5 X6 X7) (k2_zfmisc_1 \\
& X3 X4) X2) \wedge (m1_subset_1 (k6_finseqop X5 X6 X7) (k1_zfmisc_1 (k2_zfmisc_1 \\
& (k2_zfmisc_1 X3 X4) X2))))))))))
\end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge (\\
& (v1_funct_2 X1 (k2_zfmisc_1 X0 X0) X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k2_zfmisc_1 (k2_zfmisc_1 X0 X0) X0)))))) \Rightarrow (\forall X2.((v1_funct_1 \\
& X2) \wedge ((v1_funct_2 X2 X0 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
& X0 X0)))))) \Rightarrow (\forall X3.((v1_funct_1 X3) \wedge ((v1_funct_2 X3 X0 X0) \wedge \\
& (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow ((v1_funct_1 \\
& (k6_finseqop X1 X2 X3) \wedge ((v1_funct_2 (k6_finseqop X1 X2 X3) (k2_zfmisc_1 \\
& X0 X0) X0) \wedge (m1_subset_1 (k6_finseqop X1 X2 X3) (k1_zfmisc_1 (k2_zfmisc_1 \\
& (k2_zfmisc_1 X0 X0) X0))))))
\end{aligned}$$