

t6_realset1
(TMFNU8usE5pPSYiGadqHYzruqsrms6doaGde)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m2_realset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k1_realset1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $m1_realset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (k2_zfmisc_1 \\ & X0 X0) X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 \\ & X0 X0) X0)))))) \Rightarrow (\forall X2. (m1_realset1 X2 X0 X1) \Rightarrow ((v1_funct_1 \\ & (k1_realset1 X1 X2)) \wedge ((v1_funct_2 (k1_realset1 X1 X2) (k2_zfmisc_1 \\ & X2 X2) X2) \wedge (m1_subset_1 (k1_realset1 X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k2_zfmisc_1 X2 X2) X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. \\ & (m2_realset1 X2 X0 X1) \Rightarrow ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (k2_zfmisc_1 \\ & X0 X0) X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 \\ & X0 X0) X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. \\ & ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (k2_zfmisc_1 X0 X0) X0) \wedge (m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 X0 X0) X0)))))) \Rightarrow ((m2_realset1 \\ & X2 X0 X1) \Leftrightarrow (\forall X3. (X3 \in k2_zfmisc_1 X1 X1) \Rightarrow (k1_funct_1 X2 X3 \in \\ & X1)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 (k2_zfmisc_1 \\
& X0 X0) X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 \\
& X0 X0) X0))))\Rightarrow(\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 X0))\Rightarrow \\
& ((m1_realset1 X2 X0 X1)\Leftrightarrow(\forall X3.(X3 \in k2_zfmisc_1 X2 X2)\Rightarrow(k1_funct_1 \\
& X1 X3 \in X2))))
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(\forall X2. \\
& (m2_realset1 X2 X0 X1)\Rightarrow((v1_funct_1 (k1_realset1 X2 X1))\wedge((v1_funct_2 \\
& (k1_realset1 X2 X1) (k2_zfmisc_1 X1 X1) X1)\wedge(m1_subset_1 (k1_realset1 \\
& X2 X1) (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 X1 X1) X1))))))
\end{aligned}$$