

l35_fomodel3

(TMZiptZ9QALyiAN3yDNGiZnR1gKPPnvVd67)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ 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 $r2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_fomodel3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((m1_subset_1 X2 \\ & (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))) \Rightarrow ((r2_relset_1 X0 X1 X2 X3) \Leftrightarrow (X2 = X3)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (m1_subset_1 X2 (\\ & k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow ((r1_relset_1 X0 X1 X2 X3) \Leftrightarrow (\\ & r1_tarski X2 X3)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (\neg v1_xboole_0 X1) \Rightarrow \\ & (\forall X2. (\neg v1_xboole_0 X2) \Rightarrow (\forall X3. (v7_ordinal1 X3) \Rightarrow \\ & (\forall X4. ((\neg v1_xboole_0 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\ & X0)))) \Rightarrow (\forall X5. (m1_subset_1 X5 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X1 X4)))) \Rightarrow (\forall X6. (m1_subset_1 X6 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X2)))) \Rightarrow (r1_relset_1 (k4_finseq_2 X3 X1) (k4_finseq_2 X3 X2) (\\ & k8_fomodel3 X1 X2 (k4_relset_1 X1 X4 X0 X2 X5 X6) X3) (k4_relset_1 \\ & (k4_finseq_2 X3 X1) (k4_finseq_2 X3 X4) (k4_finseq_2 X3 X0) (k4_finseq_2 \\ & X3 X2) (k8_fomodel3 X1 X4 X5 X3) (k8_fomodel3 X0 X2 X6 X3))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow \\
& \quad (\forall X2.(\neg v1_xboole_0 X2) \Rightarrow (\forall X3.(v7_ordinal1 X3) \Rightarrow \\
& \quad (\forall X4.((\neg v1_xboole_0 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\
& \quad X0)))) \Rightarrow (\forall X5.(m1_subset_1 X5 (k1_zfmisc_1 (k2_zfmisc_1 \\
& \quad X1 X4)))) \Rightarrow (\forall X6.(m1_subset_1 X6 (k1_zfmisc_1 (k2_zfmisc_1 \\
& \quad X0 X2)))) \Rightarrow (r1_relset_1 (k4_finseq_2 X3 X1) (k4_finseq_2 X3 X2) (\\
& \quad k4_relset_1 (k4_finseq_2 X3 X1) (k4_finseq_2 X3 X4) (k4_finseq_2 \\
& \quad X3 X0) (k4_finseq_2 X3 X2) (k8_fomodel3 X1 X4 X5 X3) (k8_fomodel3 \\
& \quad X0 X2 X6 X3)) (k8_fomodel3 X1 X2 (k4_relset_1 X1 X4 X0 X2 X5 X6) X3)))))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0) \wedge \\
& \quad ((\neg v1_xboole_0 X1) \wedge ((m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
& \quad X0 X1)))) \wedge (v7_ordinal1 X3)))) \Rightarrow (m1_subset_1 (k8_fomodel3 X0 X1 \\
& \quad X2 X3) (k1_zfmisc_1 (k2_zfmisc_1 (k4_finseq_2 X3 X0) (k4_finseq_2 \\
& \quad X3 X1))))
\end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\
& \quad ((m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \wedge (m1_subset_1 \\
& \quad X5 (k1_zfmisc_1 (k2_zfmisc_1 X2 X3)))) \Rightarrow (m1_subset_1 (k4_relset_1 \\
& \quad X0 X1 X2 X3 X4 X5) (k1_zfmisc_1 (k2_zfmisc_1 X0 X3)))
\end{aligned} \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1_tarski X0 X1) \wedge (r1_tarski X1 X0)) \tag{7}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \tag{8}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow \\
& \quad (\forall X2.(\neg v1_xboole_0 X2) \Rightarrow (\forall X3.(v7_ordinal1 X3) \Rightarrow \\
& \quad (\forall X4.((\neg v1_xboole_0 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\
& \quad X0)))) \Rightarrow (\forall X5.(m1_subset_1 X5 (k1_zfmisc_1 (k2_zfmisc_1 \\
& \quad X1 X4)))) \Rightarrow (\forall X6.(m1_subset_1 X6 (k1_zfmisc_1 (k2_zfmisc_1 \\
& \quad X0 X2)))) \Rightarrow (r2_relset_1 (k4_finseq_2 X3 X1) (k4_finseq_2 X3 X2) (\\
& \quad k8_fomodel3 X1 X2 (k4_relset_1 X1 X4 X0 X2 X5 X6) X3) (k4_relset_1 \\
& \quad k4_finseq_2 X3 X1) (k4_finseq_2 X3 X4) (k4_finseq_2 X3 X0) (k4_finseq_2 \\
& \quad X3 X2) (k8_fomodel3 X1 X4 X5 X3) (k8_fomodel3 X0 X2 X6 X3)))))))))
\end{aligned}$$